

FORT GILLEM STRATEGIC REUSE PLAN

Forest Park/Fort Gillem
Local Redevelopment Authority
July 2007



This study was prepared under contract with the Forest Park/Fort Gillem Local Redevelopment Authority with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of the Forest Park/Fort Gillem Redevelopment Authority and does not necessarily reflect the views of the Office of Economic Adjustment.

Cousins/LNR

Forrest W. Robinson, Project Executive
President - Industrial Division
Cousins Properties Incorporated
191 Peachtree Street, Suite 3600
Atlanta, Georgia 30303-1740

FORT GILLEM STRATEGIC REUSE PLAN



Table of Contents

I.	Introduction	
II.	Methodology & Outreach.....	II-1
A.	Methodology	II-1
B.	Public Outreach	II-2
III.	Visioning & Economic Principles	III-1
IV.	Economic Analysis & Application	IV-1
A.	Market Analysis.....	IV-1
B.	Economic Analysis.....	IV-13
C.	Fiscal Analysis	IV-15
D.	Land Residual Analysis & Cash Flow.....	IV-17
V.	Strategic Reuse Plan	V-1
A.	Land Use.....	V-3
B.	Transportation & Circulation	V-5
C.	Stormwater Management	V-23
D.	Sanitary Sewer.....	V-28
E.	Water Supply	V-30
F.	Dry Utilities.....	V-32
G.	Building Inventory	V-34
H.	Entitlement Strategy	V-35
I.	Army Enclave	V-43
J.	Homeless Interests	V-44
VI.	Environmental Issues & Assessment.....	VI-1
Appendix		
A.	Documentation of Public Outreach Process	
B.	Economic Analysis Exhibits	
C.	Existing Buildings Evaluation	
D.	Detailed Environmental Report	



I. INTRODUCTION

This document presents the results of the Economic Analysis and Strategic Reuse Planning effort carried out by the Cousins/LNR Team for the Forest Park/Fort Gillem Local Redevelopment Authority (LRA). It was conducted to provide planning guidance and assistance to the LRA,

The objectives of this effort, as delineated by the LRA, included:

- Compilation and analysis of existing data and plans including environmental, physical and inventory data
- In-depth economic analysis, including identification of market opportunities, economic impacts and fiscal impacts of various redevelopment scenarios
- Development of a draft Strategic Reuse Plan and alternate concepts for Fort Gillem based upon economic opportunities, infrastructure, utilities and engineering analysis, and community input
- Analysis and summary of environmental issues and concerns, and recommended environmental transfer strategy
- Preparation of a property entitlement and disposition strategy for implementation of the Strategic Reuse Plan
- Coordination of consideration of homeless interests in regard to inclusion in the Strategic Reuse Plan

As further detailed in the following pages, the reuse planning developed three alternative strategies, with the recommended strategy, unanimously approved by the LRA on May 30, 2007, being the strategy most fully focused on job creation. The closure of Fort Gillem will cause a significant loss of jobs and opportunities to Forest Park, Clayton County and the surrounding South Metro Atlanta region, a region already in need of economic development. Accordingly, this Plan focuses on job creation and the economic prosperity that can follow expanded employment.

Over the past number of months since most of the Fort Gillem property was declared excess, the specific needs of the continuing Army enclave and federal agencies have been considered. The Federal Emergency Management Agency has withdrawn its initial request for excess property at Fort Gillem, and the exact boundaries of the Army enclave have evolved as the Army has continued to evaluate its needs. This Plan addresses all of Fort Gillem that may be surplus to the needs of the United States. Because discussions are ongoing as to the final Army enclave boundaries, this Plan may cover portions that may, in the end, remain in the Army enclave. In particular, this Plan, as approved by the LRA, includes and proposes redevelopment of all portions of Fort Gillem that lay South of Hood Avenue and proposes additional access to the redevelopment area from downtown Forest Park across the North portion of the enclave. This in the view of the Planning Team and the LRA will permit the best access to the redevelopment area to achieve the goals of the Plan. However, if portions of the property lying South of Hood Avenue remain in the Army enclave and/or the Northern access is not permitted, then this Plan should be viewed as accordingly amended. Other access to the redeveloped area is possible, but it will not as fully meet the goals of the plan.



Finally, while respectful of the distinction between the LRA's role of planning and the Army's role of disposition, this Plan – built to cause job creation – is well-suited to be implemented by one or more economic development conveyances. While the justifications for economic development conveyances can and will be subsequently detailed in appropriate applications, it should be noted that the LRA, which has been proactive in the development of a job-focused plan, also intends to be proactive in the implementation of such plan.



II. METHODOLOGY & OUTREACH

A. Methodology

Two of the nation's strongest and most experienced real estate developers have come together to assist the Forest Park/Fort Gillem Local Redevelopment Authority (LRA), in meeting its challenges. Cousins Properties Incorporated and LNR Property Corporation, as Cousins/LNR LLC (in formation), are being joined by The Benham Companies, a nationally renowned architecture and engineering firm. The Cousins/LNR team knows Atlanta – it is Cousins' national headquarters and LNR's Southeast regional headquarters. And the team knows the military and military base redevelopment – LNR is currently the master developer for five former military installations around the country and The Benham Companies is involved in numerous contracts and partnerships for and/or with various services within the Department of Defense.

The Cousins/LNR team sub-consultant members and their areas of focus for this engagement are:

- ZHA Incorporated – Planning and urban design
- Contente Consulting – Community outreach
- McKenna Long & Aldridge LLP – Legal counsel & governmental relations
- MACTEC – Environmental analysis & remediation strategy
- Kimley-Horn Associates – Land development engineering & infrastructure
- Coastal Consulting Services – Site design and construction engineering
- The Concord Group – Market & economic analysis
- Huntley Partners, Inc. – Fiscal impact analysis
- CH2M HILL – Water/wastewater & utilities analysis

The Cousins/LNR team members have unmatched knowledge and experience dealing with DoD environmental, physical and inventory data, policies and plans from multiple perspectives – as consultants on contract to the military, as partners with the military on privatization projects, and as private sector partners with LRAs in assessing and redeveloping former military installations. Many of the team members have worked together in other BRAC projects or in similar planning and analysis efforts. They know the particular challenges of base redevelopment from environmental mitigation standards for FOST and FOSET transfers to the requirements of PBC, EDC, Military Construction (MILCON) Exchange, and other fair market value conveyances. And they have worked closely with the Army on many of these projects and are familiar with specific Army issues.



B. Public Outreach Program

The purpose for developing a formalized public outreach program is to ensure consistency throughout all levels of the Fort Gillem Reuse and Redevelopment planning process. As such, this program enables the general public, government agencies, businesses and other stakeholders, to receive background and technical information in order to provide meaningful input to the LRA during the planning process. There are two foundational elements included in the Public Outreach Program:

- Facilitate open public forums/engaging community “events” where interested parties actively participate in the sharing of information, building consensus while establishing a sense of participation to encourage redevelopment of Fort Gillem.
- Dissemination of information to ensure that the general public is notified and informed of all planning activities, forums, and planning concepts throughout the entire process

After identifying key stakeholder groups, including the general public, the following public outreach techniques and venues were utilized throughout this process to provide input into the Strategic Planning process:

- Local Redevelopment Authority Board Meetings
- Local Redevelopment Authority Sub-Committee Meetings
- Public Notices and Newsletter
- Project Mailing List
- Automated Phone Message Center
- Resource Center
- Press Releases
- Public Meetings and Meeting Summaries
- Public Comment Forms

An expanded discussion of the public involvement techniques and documentation of the outreach results, including meeting attendees and public comments, is provided in Appendix A of this document.



III. VISION & OPPORTUNITY

A. Goals

The community's development objectives (goals) were identified in the Phase I Visioning study. They remained constant through the land use discernment process of the Strategic Planning phase. The emphasis is on economic growth, but also improvement in the quality of life. Six goals were established in the Visioning study and are interrelated:

- Stimulate Economic Growth
- Create a High Value Redevelopment Plan
- Improve Education
- Improve Quality of Life
- Improve the Perception of the Area
- Ensure One Community

The redevelopment planning process wove these goals into the land uses and the parcel locations in order to take advantage of the opportunity that creates significant high paying jobs, takes into account regional aspects and blends the former Army property into the city of Forest Park and surrounding areas with a seamless transition into these neighborhoods. The remaining Army enclave is a barrier to this approach on the western boundary, but that barrier is mitigated by the access reflected in this Plan (see discussion in Section V. Strategic Reuse Plan).

B. Reuse & Disposition Opportunity

Since its inception, a cornerstone of the federal Base Realignment and Closure (BRAC) process has been job creation – enabling communities long-dependent on the presence of the military to replace lost military and civilian jobs with new community jobs. Congress created a special BRAC disposition mechanism, the Economic Development Conveyance (EDC), solely for the purpose of job generation on closed military installations.

The over-arching goal of the Fort Gillem reuse strategy is job creation. Forest Park, Clayton County and the entire south side of the metropolitan Atlanta area are in need of job creation and the economic boost that jobs can bring. Forest Park and Clayton County are relatively disadvantaged compared to their more affluent neighboring counties, even with an open and active Fort Gillem, which is the largest employer in Forest Park and the second largest in Clayton County. The closure of the post will bring the loss of more than 1,000 civilian and military jobs and the economic support they provide the community.

While possessing untapped potential in terms of location, access and other factors, Forest Park has the largest number of low income families of any city of its size in the US. Clayton County has the largest number of low income loans of any county of its size in the US. They need the kind of economic boost that a carefully planned and executed reuse strategy can bring. Only by remaining an active participant throughout the process can the City of Forest Park assure that a market-based, job-focused strategy emerges and becomes reality.



The planning team considered three alternative reuse strategies. Alternative A is weighted most heavily toward economic development and job growth, reflecting both understood needs of the community and the potential of the site. This alternative evolved from the initial concept drafted by the LRA's Finance and Economic Development Sub-Committee at the first workshop. It has been the clear choice because it is both the most achievable and the most beneficial. This alternative also best considers the potential land use constraints presented by environmental remediation activities.

The recommended disposition strategy that best enables the successful implementation of this reuse strategy is an Economic Development Conveyance. The LRA has voted to request that all surplus land at Fort Gillem be conveyed to the LRA through EDCs, and the need and justification will be articulated in appropriate EDC applications.

An EDC is the preferred disposition strategy for two reasons. First, no means of conveyance better fits a job creation strategy than an EDC. The proposed land uses in Alternative A meet the criteria for an EDC by generating the potential for a significant number of jobs, many skilled and therefore high paying. And the market study has established that the proposed land uses are realistically achievable given current and project market conditions. Alternative A is dominated by job creation uses, with more than 40 percent of the land acreage devoted to light industrial and almost eight percent to business park and commercial uses. While there is a minority (11 percent) of residential uses, the entire property should be treated holistically and be included to the LRA under an EDC. The residential land use parcels are small, but integral components of the total redevelopment project. While providing short-term jobs during construction, the housing will be attractive to the new workers on the property. The open space areas are amenities demanded by the community. Since the major portion of parkland is sited on areas identified as environmentally challenged parcels, there is little value in transfer under separate conveyances. The job creation and land use sections of this report provide detailed data to support this type of conveyance.

Importantly, it is only through an EDC that Forest Park can control its own destiny. EDCs can only be made to LRAs and this assures that the LRA, alone or with the team that it selects and engages, will be the controlling force for the redevelopment of the installation. Many disposition strategies would put the LRA and Forest Park in passive roles, allowing them only to advise or serve as the zoning authority; however, zoning power may prevent undesirable development but cannot assure positive development. The special conveyance tool of an EDC recognizes the community's major role in the reuse of the property. No other conveyance method meets the community's need and desire to control the development for long-term economic growth as well as retention of quality of life. The Army has long been a welcomed part of the community, but other than the retained enclave, it is leaving Forest Park. Now the responsibility will be on the LRA and Forest Park, and they must be able to choose how and when the development should proceed.

EDCs can only be made to "implementation" LRAs. Thus, shortly after the submission of the reuse plan by the LRA to the Army, the LRA should consider seeking broader implementation powers from the City of Forest Park and begin making plans to be a full and active participant in the redevelopment of the post.



IV. ECONOMIC ANALYSIS & APPLICATION

A. Market Analysis

Fort Gillem represents a unique reuse opportunity. As a large contiguous parcel, it presents a virtually blank canvas for the LRA to create a successful planned community. It can do so with a land use allocation strategy that matches market realities over its lifetime, maximizes synergies between various land uses and adds to the economic livelihood of Forest Park.

The Site is regionally well positioned in the path of future growth projected for South Atlanta. With easy and improving access to central Atlanta – Hartsfield-Jackson International Airport and Downtown specifically – the community will be able to attract residents and customers/users from a large area.

Although the Site itself represents a prime redevelopment opportunity, the health of the real estate markets concerned present some challenges to the overall plan. Although the supply and demand environments for residential and industrial uses in the submarket are strong, the Cousins/LNR Team projects limited demand for office and retail space at the future community.

The Team has developed three alternative reuse scenarios summarized and tested in the following report. In each, the Team has provided allocation recommendations focusing on land use and product types that make the most sense given the supply/demand environment and the inherent assets and liabilities of the Site.

- Alternative A includes 800 acres of revenue producing uses, the majority of which are located in a 642-acre industrial/business park campus in the northern portion of the property. Aside from the significant industrial/business park space, Alternative A calls for approximately 500 for-sale residences, 435,000 square feet of retail and 280,000 square feet of office uses. Based on a preliminary analysis of discounted revenue flow from finished lot sales, Alternative A represents revenue potential of approximately \$50.6 million.
- Alternative B includes 780 acres of revenue producing uses, the majority of which are located in a 600-acre industrial/business park campus in the northern portion of the property. Within the industrial/business park allocation, Alternative B has significantly more business park uses. Aside from the significant industrial/business park space, Alternative B calls for approximately 350 for-sale residences, 210 apartments, 870,000 square feet of retail and no office space. Based on a preliminary analysis of discounted revenue flow from finished lot sales, Alternative B represents revenue potential of approximately \$48.3 million.
- Alternative C includes 774 acres of revenue producing uses, the majority of which are located in a 585-acre industrial/business park campus in the northern portion of the property. Aside from the significant industrial/business park space, Alternative C calls for approximately 521 for-sale residences, 170 apartments, 730,000 square feet of retail and no office space. Based on a preliminary analysis of discounted revenue flow from finished lot sales, Alternative C represents revenue potential of approximately \$42.1 million.



As part of the Phase II market analysis effort, the Team reviewed the Phase I visioning plan and component reports to ensure the findings, conclusions and recommendations were followed and expanded upon during this iteration. From a market perspective, conclusions reached during the prior analysis were the basis upon which further land use planning exercises were completed, arriving at the three proposed scenarios.

Exhibits for this section are provided in Appendix B of the report.

1. Land Use

The Cousins/LNR Team was tasked with the identification of ideal mix/intensity of several key revenue-producing product types on the Fort Gillem property, including Industrial, Business Park, Residential (for-sale and for-rent), Retail and Office land uses. To do so, the team completed in-depth market analyses including:

- An evaluation of the market opportunity for each candidate land use given the properties' inherent strengths and weaknesses
- Definition of market areas or spheres of influence for each candidate land use and analyses of macro supply and demand metrics
- Short- and long-term statistical demand forecasts for each candidate land use
- Identification of large scale future projects that would be likely to compete with development at the Site
- Quantitative estimate of the macro-level gap between supply and demand for the specific product types planned for the Site
- Analysis of analogous large scale redevelopment and town center projects across the nation
- Development, testing and refinement of several reuse scenarios for the property, using the results of the above analyses as well as significant stakeholder input

A table summarizing the acreage allocations used in this analysis is shown on Appendix B-3.

a. Current Market Opportunities

Industrial/Business Park

Overall, subject to supply constraints and long-term trends present in the market, Fort Gillem represents a strong opportunity to offer new, close-in industrial space that will service the active South Atlanta/Airport submarket. Given the property's location at the confluence of several main transportation corridors, its proximity to Hartsfield-Jackson International Airport, the character of Forest Park and its own former use, a potential industrial/business park at Fort Gillem is well positioned to outperform and out-capture its local and regional competitors.

For-Sale Residential

Given the constraints of the Site and Forest Park's current character, the majority of residential opportunity at Fort Gillem will be moderate density, moderately priced single-family detached homes. It is unlikely that the Site will become a large-scale residential draw given the current market conditions in South Atlanta and the Site's inherent characteristics.



Apartments

The Team projects somewhat weaker-than-normal rental demand through 2010. Importantly, a lack of significant ownership cost increases has mitigated potential increases in demand for apartment homes, as the relative cost is not great. The largest barrier to homeownership is availability of funds for down payments, keeping apartments popular in areas with low incomes or large transient populations. However, given employment generating uses planned for the property, there will be a strong opportunity to offer rental housing at Fort Gillem.

Retail

Retail opportunities at Fort Gillem will be limited to neighborhood-scale centers catering to the property's residents and those in its immediate vicinity. Although significant demand will be generated by on-base households and employees, local demographics do not support a larger scale retail program that would need to compete regionally with current large-scale destination shopping centers across Clayton County.

Office

Based on new job creations and the obsolescence of current space, the Team projects annual office demand potential in Clayton/Henry Counties to be less than 50,000 square feet per year. With a large portion of this space diverted to rapidly growing Henry County, the office opportunity for the submarket is limited to town center, internally-supported service office uses.

b. Macro Supply & Demand

Industrial Market

Over the past five quarters, the Atlanta MSA's industrial market has grown rapidly, adding an average of approximately 11 million net square feet each period. Absorptions have lagged somewhat, averaging approximately 3 million square feet per quarter. Major brokerage houses project moderation of the strong construction rates over the next cycle as users occupy recently built space and vacancy rates improve from the high of 16.5% reached in the third quarter of 2006. Additionally, current vacancy rates are artificially high due to the structural gap created by users changing demands and obsolescence of current stock.

With many inherent strengths, the Airport/South Atlanta submarket (including Clayton and Henry Counties as well as a portion of Fulton County around the airport) accounts for more than its fair share of industrial employment and space. Industrial/Business Park employment makes up approximately 30% of Clayton County's workforce compared with approximately 20% for the Metro Area overall. At this time, the submarket accounts for 19% of total industrial space in the MSA, but only 9% of total households.

Within the South Atlanta submarket, the majority of industrial space is in bulk warehouse configuration, with some distribution space and little flex space. However, vacancy rates in the flex sector are much lower than MSA averages, reflecting strong and increasing demand for flex space over the next cycle.



For-Sale Residential Market

Unlike many cities in the United States, Atlanta did not experience a dramatic bubble in residential activity and prices over the last three years. With only 25% total home price appreciation over the last half decade, Atlanta ranks 219th out of 275 U.S. metro areas. For January through August 2006, the median home price in the core Atlanta area was \$194,000. The Team attributes the lack of home price appreciation to several factors, including a large and constantly refreshing stock of housing product that includes many points of sale, lack of public builder penetration and physical limitations including local incomes, traffic congestion, moderate employment growth, etc.

Within Clayton County, the story is similar. Although median prices have increased steadily over the past eight years and home sales volume has generally increased, the area has lagged behind much of the nation since 2002. Nevertheless, Clayton County is feeling the pressure created by the softening in the national market and is projected to post fewer new and existing home sales in 2006 versus the totals seen in 2005.

Importantly, despite representing almost 8% of total households in the core Atlanta market, Clayton County captured an eight year average of only 6.5% of total home sales (5.7% and 5.5% in 2005 and YTD 2006, respectively) as real estate activity has become increasingly focused towards areas north of Interstate 20, which lies north of Clayton County.

At this time, Clayton County represents the least expensive county in the core market, with an average sales price of only \$135,000. While affordable for its residents, the subject site development will need to change the face of current product in the county, offering housing options to a wider spectrum of buyers and penetrating regional demand for moderate to high-end homes.

For-Rent Residential Market

The performance of the Atlanta area apartment market has been mixed over the past few years. Although the markets suffered with the post 9/11 recession in 2002-2003 with market-wide vacancies as high as 11.5% and decreases in average rents, the market demonstrated full recovery by 3Q 2006. Clayton and Henry Counties, home to significant employment and high rentership have consistently performed better than the region overall, adding significant numbers of new Class A units through the recession and experiencing overall vacancy rates on par with the Atlanta MSA as a whole. In 2002, Atlanta MSA rents fell 4% on average compared with only 2% in the Clayton/Henry County submarket.

Retail Market

The Clayton County retail market is largely in equilibrium, exhibiting little growth potential. Although vacancy has held steady around 10% for the past two years, rents have increased moderately (2% to 3% annually over the same time period). Low median incomes in the area have limited the demand for retail space and focused spending to several key commercial corridors and big-box centers.



Office Market

The office market in the Atlanta MSA is lackluster, with an overall vacancy rate of almost 20%. Lease rates, which were as high as \$22 per square foot per year in the 3Q 2002 are down significantly to just above \$20 per square foot per year last quarter. In many ways, Clayton County represents the weakest office submarket in the area with the highest vacancy rate (27.9%), lowest asking lease rate (\$14.18), highest availability rate (28.6%) and negative net absorption through 1Q-3Q 2006.

c. Statistical Demand Forecasts

Industrial/Business Park

Based on a long-term (through 2020) employment-based analysis, the Team projects demand for approximately 3.9 million square feet of new industrial space annually in the South Atlanta submarket.

For-Sale Residential

Based on our short-term, household-based analysis, there is demand for approximately 4,800 new homes per year through 2011 in Clayton and Henry Counties; representing a 16% capture of the overall demand base in the Atlanta MSA.

- On a long term basis, with employment projections as the key driver of household demand potential, the Team projects somewhat weaker-than-normal demand through 2010 and a subsequent return to prior levels and beyond through 2030. These figures demonstrate a weaker market for a slightly longer duration compared with many projections on the current national volume slowdown.

For-Rent Residential

Short term apartment demand in Clayton and Henry Counties is strong, at approximately 11,400 units annually (433 new units per year) through 2011.

- On a long term basis, flat employment growth will limit apartment demand between 2010 and 2015. From 2015 through 2030 however, strong job additions will directly increase demand potential for new apartment units.

Retail

Households in the trade area spend approximately \$40k per year as consumers, the highest proportion on transportation, food and health care. From a retail perspective, the highest spending is focused towards travel, personal expenses & services and various types of apparel. Even though Clayton County does not currently have a true town center environment, growth and demand figures limit the opportunity to create a large scale retail offering on site.

- Currently Forest Park has a net retail outflow of approximately \$63 million. At a conservative spending rate of \$230 per square foot, this financial outflow corresponds to approximately 270,000 square feet of additional retail required to reach equilibrium.
- The addition of 103 households per year corresponds to an annual revenue increase of \$4.2 million in the retail trade area per year, supporting approximately 18,000 new square feet per year across all retail categories in the trade area.



Office

Based on new job creations and the obsolescence of current space, the Team projects annual office demand potential in Clayton/Henry Counties to be less than 50,000 square feet per year. With a large portion of this space diverted to rapidly growing Henry County, the office opportunity for the submarket is limited to internally-supported service office uses.

d. Identification of Potential Land Uses

The list below represents land use categories and product types evaluated by the team:

Industrial/Business Park

- HQ-Assembly
- Bulk Warehouse
- Logistics
- Light Industrial
- R&D/Service Office

Residential

- Single-family detached; 3,500 – 12,000 square foot lots
- Maximum density of 10 du/acre apartments

Retail

- Neighborhood Center

Office

- Neighborhood Office

2. Market Area Definitions

In order to complete market analyses for Fort Gillem, key market areas or spheres of influence were delineated for each land use type. The following represents a summary of each area.

Industrial

The Airport/Clayton and Henry Counties and City of Atlanta South of I-20 submarkets were identified as key spheres of influence for industrial and business park product to be built at the subject site due to their consistent character, relative distance to the airport and strong regional transportation infrastructure.

Residential

The Primary Market Area (“PMA”), the source of the majority of demand for residential uses at the subject site, is defined as Clayton, Henry, De Kalb, Gwinnett, Fulton, Douglas and Cobb Counties. The Competitive Market Area (“CMA”), the source of competitive supply, is defined as Clayton and Henry Counties.



Retail

The retail trade area (“RTA”) is comprised of the cities of Forest Park, Lake City, Conley and Morrow.

Office

The office market area (“OTA”) is comprised of the Clayton and Henry Counties. The cities of Forest Park, Lake City, Conley and Morrow represent the Core Office market area.

3. Identification of Potential Future Competition

Although there are many large-scale regional projects planned throughout the Atlanta MSA, the majority will not compete directly with the Fort Gillem property, given their location, plan and regional impact. However, there are several key redevelopment nodes in Clayton County that will directly impact the reuse of Fort Gillem. Please see the list and summary statistics below:

Villages at Ellenwood

- Approximately 400 acre master-planned community
- 1.4 million gross square feet of specialty retail shops, restaurants, entertainment facilities, hotels, and office space, including a Super Wal-Mart anchor.
- 210 acres of residential development, average density 5.21 du/ac = approximately 1,000 apartments, townhomes, condominiums and single family homes. Lead residential builder: Peachtree Homes
- Designated a “tax allocation” district to provide funding for extraordinary infrastructure costs, a first in Clayton County

Mountain View

- Objectives: create a transit-oriented district to facilitate more efficient commuting and decrease traffic problems; add green spaces; add diverse housing options and multi-modal facility.
- Industrial/Distribution Uses - Southern Crescent Transportation Center
- Office/Office Park Uses
- Hotel
- Retail Uses

Forest Park

- Objectives: expand the State Farmer's Market located in the South Atlanta submarket; create opportunities for mixed-use development; revitalize main-street district; work with Fort Gillem redevelopment to facilitate a successful community.

Southside Hartsfield Redevelopment and Stabilization Plan

- Objectives: encourage neighborhood stabilization; encourage redevelopment; work to create a good environment adjacent to Hartsfield Airport.
- Mixed-Use Residential



- Retail Uses
- Industrial/Distribution Uses
- Office Uses

Jonesboro

- Objectives: expand housing and retail sector; improve area transportation; attract tourism; encourage commercial development.
- Retail (New Town Plaza)
- Housing
- Transportation (Commuter Rail Station)
- Tourism (Museum and Arts Center)

Gateway Village

- Objectives: create significant mixed-use economic development; encourage redevelopment of education, retail and entertainment centers.
- 165 Acres
- Multi-modal/passenger rail station
- Civic uses
- Education uses

4. Supply vs. Demand

Fort Gillem’s market areas are largely undersupplied or in equilibrium. Despite its scale and significant new additions to supply, the industrial and business park market continues to feed on airport proximity and transportation infrastructure, showing a net undersupply of 900,000 square feet over the next year. With significant new housing growth in Clayton and Henry Counties, the residential market is largely in equilibrium. Retail and office markets demonstrate healthy but relatively minor undersupply in the near term. Please see the table below.

<u>INDUSTRIAL</u>	<u>RESIDENTIAL</u>	<u>RETAIL</u>	<u>OFFICE</u>
Market Area Airport/ South Atlanta	Market Area Clayton/Henry Counties	Market Area Retail Trade Area	Market Area Clayton/Henry Counties
Demand Base 3,900,488 sq ft per year	Demand Base 5,203 units per year	Demand Base 72,932 sq ft per year	Demand Base 44,672 sq ft per year
Currently Under Construction 2,996,429 sq ft	LTM Permits 5,396 units	Currently Under Construction 50,000 sq ft (approx.)	Currently Under Construction 0 sq ft
Under/(Over) Supply 904,059 sq ft	Under/(Over) Supply (193) units	Under/(Over) Supply 22,932 sq ft	Under/(Over) Supply 44,672 sq ft



In addition to baseline market demand demonstrated above, the Fort Gillem reuse will be able to capitalize on its scale to attract customers and users from a wide area, increasing the overall demand potential for each future product type. As such, despite near equilibrium for the residential, retail and office markets, the opportunity is strong.

5. Product Menu

The scenario by scenario product program shown on Appendix B-4 through B-6 represents recommended acreage allocations by land use type and the segmentation described in the previous section.

Alternative A includes 800 acres of revenue-producing uses and is heavily non-residential. 640 acres are industrial or business park, corresponding to a gross building area of approximately 9.4 million square feet. Industrial and business park uses will be actively selling throughout the first eight years of Fort Gillem's sales lifetime. 153 acres are allocated to the residential product program, corresponding to approximately 510 housing units, a gross density of 3.8 units per acre, and 210 for-rent housing units at a gross density of 10 units per acre. Alternative A includes 25 acres of neighborhood commercial ($\pm 435,000$ square feet) and 17 acres of neighborhood office ($\pm 280,000$ square feet).

Alternative B includes 780 acres of revenue-producing uses and is also heavily non-residential. 606 Acres are industrial or business park, corresponding to a gross building area of approximately 8.7 million square feet. Industrial and business park uses will be actively selling throughout the first eight years of Fort Gillem's sales lifetime. 124 Acres are allocated to the residential product program, corresponding to approximately 353 for-sale housing units and 210 apartments. Alternative B includes 50 acres of neighborhood commercial ($\pm 870,000$ square feet) and no neighborhood office space.

Alternative C includes 774 acres of revenue-producing uses and is also heavily non-residential. 606 Acres are industrial or business park, corresponding to a gross building area of approximately 8.4 million square feet. Industrial and business park uses will be actively selling throughout the first seven years of Fort Gillem's sales lifetime. 147 Acres are allocated to the residential product program, corresponding to approximately 521 for-sale housing units and 170 apartments. Alternative C includes 42 acres of neighborhood commercial ($\pm 731,000$ square feet) and no neighborhood office space.

6. Competition & Recommended Positioning

The following represents the Fort Gillem positioning strategy relative to comparable or competitive development currently active in the relevant market areas.

Industrial

Industrial comparables categorized in three main groups: 1) Distribution warehouse; 2) Warehouse; 3) Flex/Office Space.

- Distribution Warehouse: Approximately 1.5 million square feet available in Clayton County; Average lease rate = \$8.25 per square foot per year; Maximum size = 300,000sf+
- Warehouse: Approximately 1.9 million square feet available in Clayton County; Average lease rate = \$7.71 per square foot per year; Maximum size = 630,000sf+
- Flex Space: Approximately 500,000 square feet available in Clayton County; Average lease rate = \$12.79 per square foot per year; Maximum size = 250,000sf+



Recommended industrial positioning:

- In line with industrial comparables in Forest Park and Morrow

Please see Industrial Positioning exhibit on Appendix B-7.

For-Sale Residential

For-sale residential comparables in surrounding cities and communities are shown below.

Market average approximately \$225,000 at 2,500 square feet. Key comparables:

- Villages of Ellenwood: Comparable location, average approximately \$200,000 at 2,000 square feet (\$100 per square foot)
- Fayetteville: Superior location in southern Fayette County, average \$300,000+ at 2,500 square feet (\$122 per square foot)
- Peachtree City: Highest-end regional master planned community comparable, average \$430,000+ at 2,500 square feet (\$173 per square foot)
- Forest Park: Currently bottom of market, \$170,000 at 2,500 square feet (\$68 per square foot)

Recommended for-sale residential positioning:

- $\pm 40\%$ premium to currently selling Forest Park comparables
- In-line with large-lot Jonesboro and Ellenwood single family product
- In-line with Villages at Ellenwood
- Significant discount to Fayetteville and Peachtree City

Please see For-Sale Residential Positioning exhibit on Appendix B-8.

For-Rent Residential

For-rent residential comparables in surrounding cities and communities segmented into two main groups, higher-end suburban rentals and in-town value-oriented communities.

- Higher-end suburban average \$1,200 per month at 750 square feet (\$1.60 per square foot)
- In-town value average \$1,000 per month at 1,250 square feet (\$0.80 per square foot)

Recommended for-rent residential positioning:

- $\pm 14\%$ to 20% premium to in-town value communities
- Discount to higher-end suburban rentals

Please see Apartment Positioning exhibit on B-9.

Retail

Retail comparables categorized in five main groups: 1) Super Regional; 2) Regional; 3) Power Center; 4) Neighborhood Centers; 5) Community Strip Centers.

- Super Regional: Southlake Mall. Average lease rate = $\pm \$17$ per square foot per year
- Regional: Springhill Village. Average lease rate = $\pm \$16$ per square foot per year
- Power Center: Average lease rate = $\pm \$30$ per square foot per year



- Neighborhood Center: Average lease rate = \pm \$25 per square foot per year
- Community Strip Center: Average lease rate = \pm \$20 per square foot per year

Recommended retail positioning:

- In line with Community and Strip Centers in College Park, Forest Park and Morrow, in line with Southlake Mall and Springhill Village average.

Please see Retail Positioning exhibit on Appendix B-10.

Office

Office comparables primarily organized by size and location.

Local Comparables: Average approximately \$17 per square foot per year

- Large variation in price due to location, finish/service level and age
- Highest priced building \$40+ per square foot per year

Forest Park: Office comparables are priced at market average, little available space

Recommended office positioning:

- In line with highest priced College Park and McDonough product
- 30% to 60% premium to majority of local comparables
- \pm 35% discount to small private executive offices at top of market

Please see Office Positioning exhibit on Appendix B-11.

7. Segmentation Strategy

Given the large scale of the Fort Gillem reuse, a strong segmentation strategy is essential to the timely build-out and disposition of the property. Primarily, this has been accomplished through a distinct segmentation of product types under each general land use category. For each land use type, the team identified a maximum allowable demand capture and segmented products to be delivered within that limitation.

For industrial and business park uses, given the lack of available supply in the South Airport Submarket and significant user interest in the property, the maximum allowable annual capture was approximately 25% of the overall market, or 1 million square feet annually. Five product lines were developed to limit internal competition for users and customers, and to increase the symbiotic relationships between on-property tenants.

The residential product program was segmented to provide the shortest possible absorption timeframe within specified constraints, using a seven product line program ranging from for-sale single family units on lots ranging from 3,500 to 12,000 square feet and low-density apartments. Given the products' differing physical characteristics and price point, the residential program will appeal to a wide swath of potential Clayton and Henry County buyers and renters, enabling multiple product lines to sell concurrently. In general, segmentation-driven, for-sale absorption is projected at 24-36 units per year for all actively selling product lines, a maximum of 126 units per year across the whole community. Given this assumption, Fort Gillem will require less than 3% of the overall for-sale residential demand in Clayton and Henry Counties. With approximately 200 apartment units and a 24-month lease up, Fort Gillem will require demand capture of approximately 23%.



Given their small scale, retail and office uses were assumed to be a single product program, necessitating little product segmentation. However, during construction and build-out, a segmentation strategy for target tenants will need to be identified in order to ensure coverage of key retail and office groups. Preliminary research indicates strong unmet demand for furniture stores, electronics stores, department stores, warehouse clubs and eating/drinking places.



B. Economic Impact Analysis

Assessing the economic impact of each of the three development alternatives yields results included in the “OVERALL SUMMARY: Impacts” chart below. The development alternatives are those indicated in the preceding section and differ in the amount of development that occurs in each of the following categories:

- Single-family Detached Housing
- Multi-family Rental Housing
- Neighborhood-serving Retail
- Neighborhood-serving Office
- Business Park Office, with a maximum of 50% Office within each facility
- Light Industrial/Assembly, incorporating HQ-Assembly and Light Industrial
- Warehouse/Distribution, incorporating Bulk Warehouse and Logistics

OVERALL SUMMARY: Economic Impact

Items / Categories	Alternative A	Alternative B	Alternative C	
Housing Units Created	717	563	691	Units
Retail Square Footage Created	435,600	731,808	731,808	SF
Local Commercial Office Square Footage Created	281,398	-	-	SF
Business Park Office Square Footage Created	751,410	1,731,510	1,557,270	SF
Light Industrial/Assembly Square Footage Created	3,682,562	2,918,520	2,985,167	SF
Warehouse/Distribution Square Footage Created	4,646,981	3,550,140	3,165,070	SF
Permanent Jobs Created (FTE)	17,642	16,473	15,744	Jobs
Construction Jobs Created (FTE Man Years)	4,688	4,343	4,313	Jobs

The key economic impact that the redevelopment of Fort Gillem can have on the area economy is its potential to create full-time permanent jobs as well as temporary, but critical, full-time-equivalent (FTE) construction jobs. The jobs themselves are the foundation for income generation that, in turn, will recycle into and through the local economy as that income is spent and re-spent, producing “multiplier impacts” that could be identified and quantified in a more detailed analysis.

In the above direct-impact analysis – i.e. excluding multiplier effects – Alternative A, which includes the greatest amount of proposed Light Industrial, HQ-Assembly, Logistics and Bulk Warehouse, generates the largest number of permanent FTE jobs. Alternative C generates the least, as might be expected from its amount of housing – the largest among the three scenarios – which generates construction jobs, but not permanent jobs in and of itself.

The job-creation calculations are based on several factors that are incorporated into a multi-level economic model. In addition to the proposed amount (either in square footage or housing units) of each type of development product, the primary factors impacting jobs are (1) the number of jobs created per square foot of a particular type of product and (2) the cost of construction of a particular type of product.



The assumptions incorporated into this model regarding jobs per square feet are included in the following table.

DEVELOPMENT PRODUCT	SF PER JOB/ PER EMPLOYEE
Bulk Warehouse/Distribution/Logistics	750
Light Industrial/HQ-Assembly	500
Business Park Office (max 50% office)	500
Local-serving Commercial Office	250
Local-serving Commercial Retail	300

Construction jobs are based on the assumptions from industry data that (1) approximately 25 percent of total development costs are labor and (2) the average FTE construction wage in the Atlanta region is approximately \$40,000. Alternative A generates the largest number of the three scenarios simply because the projected total cost of the entire development program under Alternative A is greater than the costs of either Alternative B or Alternative C – although the total development costs for all scenarios are relatively equal. The more significant difference in job creation under the three scenarios is in the number of permanent jobs created, which is a function of the type of development that occurs, not its cost.

Assumptions regarding development costs are described in more detail in the next section regarding fiscal impacts.



C. Fiscal Impact Analysis

Fiscal impacts of the three potential development alternatives focus primarily on tax revenue generation for each of the major local recipients of those revenues: the City of Forest Park, Clayton County and the Clayton County School System. There are also impacts on Fire District, Hospital and Bond-service tax revenues, as well as sales tax revenues distributed among all seven Clayton County municipalities and the County itself.

OVERALL SUMMARY: Fiscal Impact

Items / Categories	Alternative A	Alternative B	Alternative C	
Housing Units Created	717	563	691	Units
Retail Square Footage Created	435,600	731,808	731,808	SF
Local Commercial Office Square Footage Created	281,398	-	-	SF
Business Park Office Square Footage Created	751,410	1,731,510	1,557,270	SF
Light Industrial/Assembly Square Footage Created	3,682,562	2,918,520	2,985,167	SF
Warehouse/Distribution Square Footage Created	4,646,981	3,550,140	3,165,070	SF
Total New Development Investment	\$ 750,018,000	\$ 749,157,000	\$ 737,561,000	
Addition to Tax Base at Completion (100% Value)	\$ 871,502,000	\$ 826,550,000	\$ 816,687,000	
Total New Real Property Taxes	\$ 243,007,000	\$ 220,802,000	\$ 223,635,000	
City of Forest Park* + Hospital	\$ 43,781,000	\$ 40,733,000	\$ 39,691,000	
Clayton County	\$ 58,251,000	\$ 52,650,000	\$ 43,783,000	
Clayton County School System	\$ 140,975,000	\$ 127,419,000	\$ 130,161,000	
Total New Sales Tax Revenues	\$ 25,047,000	\$ 32,931,360	\$ 36,633,960	

NOTE: All Constant 2007 Dollars

*** Homestead Exemption for City of Forest Park included @ \$151,000; Homestead Exemptions minor for County and Schools and are captured in revenue discount at 95%.**

The “Total New Development Investment” of each of the three scenarios represents the total development costs of each, as referenced in Section B. above. The “Addition to Tax Base at 100% Completion” incorporates development costs to some extent, particularly in the early years of a development before sales and/or rent revenue data can be considered a reliable indicator of a property’s true market value. At some point, however, the basis for real property tax appraised values will shift to revenues generated by the facilities rather than their initial cost. Thus, over the ten-year period of time anticipated in this analysis, the appraised value – the addition to the tax base – of the property will exceed its initial cost, producing an overall addition to the area tax base well in excess of that initial development cost.

The key unit construction costs incorporated into this analysis for the various development product types are indicated in the following table.

DEVELOPMENT PRODUCT	HARD COST PER SF	TOTAL COST PER SF
All Industrial / Bulk Warehouse / Distribution / Assembly / Logistics	\$ 45.00	\$ 58.50
Business Park Office (max 50% office)	\$ 60.00	\$ 78.00
Local-serving Commercial Office	\$ 80.00	\$ 104.00
Local-serving Commercial Retail	\$ 90.00	\$ 117.00
Single-family Detached Housing	A = \$ 74.15 B = \$ 78.70 C = \$ 73.80	A = \$ 96.40 B = \$ 102.31 C = \$ 95.94
Multi-family Housing	\$ 60.00	\$ 78.00



All categories incorporate other factors, such as soft costs and the average size of the housing. Although development will occur over an extended period of time, no escalation in costs is projected; all amounts are in constant 2007 dollars. There almost certainly will be significant “real” increases in construction costs over the next ten years – i.e. over and above inflation. While they can be projected and subjected to sensitivity analysis, this would likely add more confusion than value to this impact analysis.

As stated above, valuations for real property tax purposes (personal property taxes excluded from this analysis) will be based within two to three years of construction completion of a given development product on rent or sales (for housing) revenues. The rates indicated in the three alternatives have been incorporated into this impact analysis. Assumptions regarding cap rates have also been incorporated. Both are shown on the following table.

DEVELOPMENT PRODUCT	RENT PER SF	ASSUMED CAP RATE
All Industrial / Bulk Warehouse / Distribution / Assembly / Logistics	Average Rates: A = \$ 3.97 B = \$ 4.18 C = \$ 4.14	6.5 %
Business Park Office (max 50% office)	\$ 7.50	6.5%
Local-serving Commercial Office	\$ 24.50	6.5%
Local-serving Commercial Retail	\$ 18.00	7.5%
Single-family Detached Housing	Average Sales Prices: A = \$254,533 per unit B = \$270,122 per unit C = \$253,334 per unit	N/A
Multi-family Housing	\$ 1.025 per SF per Month	8.0%

Tax rates applied are the millage rates for the current tax year. The \$151,000 basic Homestead Exemption (a combination of a \$1,000 “Regular” exemption and a \$150,000 “Additional Regular” exemption on assessed values of owned residential units) effectively negates any additional property tax revenues from owned residences projected in any of the three alternatives. For an owned residential unit to generate tax revenues for the City after applying these basic Homestead Exemptions, it would have to be appraised at over \$377,500. None of the alternatives include housing priced that high. Various exemptions offered by the County and Schools are extremely low and target very low income households (which generally are not homeowners), the elderly, disabled and veterans. These exemptions are accounted for in the tax revenue discount of 95 percent applied to Gross Tax Revenues.

Sales tax revenues assume that the 1 percent (1 cent per dollar) Lost Option Sales Tax (LOST) will continue indefinitely.



D. Land Residual Analysis & Cash Flow

The Cousins/LNR Team completed residual analyses to identify the static land residual – total sellout value less improvement costs – on a product-by-product basis and for the community as a whole as well as discounted revenue flow for each scenario. Inputs to the model include price positioning assumptions discussed in previous pages, construction costs gathered through interviews in the market, and market standard soft costs, builder profit and financing assumptions. Land residual analyses by product are presented in Appendix B-12 through B-16.

Based on the residual values described above and per product absorption figures, the Team has projected the net present value of each development scenario, shown in the exhibits in Appendix B-17 through B-19. Using a twenty percent discount rate, Alternative A represents the highest net present value – \$31.8 million.



V. STRATEGIC REUSE PLAN

The Visioning study set the framework for the base reuse strategy. During this first phase the public provided significant input. Community representatives with diverse backgrounds were selected by the LRA for three sub-committees: the Healthy Community and Quality of Life Sub-Committee, the Reuse and Design Sub-Committee, and the Finance and Economic Development Sub-Committee.

At the beginning of the Strategic Planning phase and following the LRA direction, facilitators met with the sub-committees to commence planning the reuse of the installation. Recognizing that the initial formation of a comprehensive reuse plan is best developed by the community, these committees set aside a full-day workshop to understand the base reuse planning process, review the community goals, and prepare draft concepts of a reuse plan.

Each committee worked separately to prepare its concept for the reuse of the base. The direction given was to consider the property as undeveloped land. The only constraint was to leave the Army enclave intact. The other caveat was that these conceptual plans would undergo considerable change based on environmental conditions, market demand, transportation requirements, land characteristics and any other factors that could affect the proposed land uses.

The three conceptual scenarios derived from the workshop became the basis for alternative plans that would undergo study. The three plans prepared can be described as Alternative A – The Business Development; Alternative B – The Regional Attractor; and Alternative C – The Quality of Life. These plans were briefed to the LRA and to the general public. Comments were taken. At this point the detailed reuse planning process commenced and went through several stages as refinements were proposed, developed, discussed and amended. Throughout the process public comment was sought and considered.

The selection of the preferred plan to become the comprehensive land use plan was the primary goal in the planning process. The alternatives were used to test market conditions, ensure commitment to community goals and establish sustainable and achievable reuses. Of particular concern were the Army Enclave and the possible conveyance of a significant portion of the property to FEMA. Several alternatives addressed locations and options for a work-around of the federal enclaves.

Fortunately FEMA withdrew its application for property at Fort Gillem. With this constraint removed, the major effort became the identification of the preferred alternative and shaping that alternative around the Army enclave. Because the Army enclave lies between the redeveloped area and the remainder of Forest Park, it has posed special planning issues especially as it relates to access. The Army has shown flexibility in the final size and shape of its enclave in a process that is ongoing.

In developing the optimum plan for the redevelopment, all alternatives included access across the northern portions of the Army enclave as well as proposing redevelopment of all portions of Fort Gillem that lie south of Hood Avenue. The LRA intends to continue discussions with the Army about both aspects of the enclave as these are important for optimum access and traffic flow. However, if in the final configuration the LRA's request for these portions of the present enclave cannot be accommodated, then this Plan should be viewed as amended accordingly.

Alternative A – the plan most focused on economic development and job creation – is the recommended plan approved by the LRA. As noted, it is subject to amendment if portions lie within the final Army enclave. This plan was chosen because it maximizes the benefits to the community by combining economic value with community objectives. It provides flexibility in the long term for changing market conditions and represents the community development strategy for economic development, job creation and long-term growth.

Alternative Concept	A		B		C	
	Acre	%	Acre	%	Acre	%
Single Family Residential - Max. Density 4 Dwelling Units per Acre						
SF 1	37		39		18	
SF 2	42		64		72	
SF 3	34				41	
SF 4	19					
Subtotal	132	9.3%	103	7.2%	131	9.2%
Multi-Family (Med. Density) Residential - Max. Density 10 Dwelling Units per Acre						
MF 1	21		21		17	
Subtotal	21	1.5%	21	1.5%	17	1.2%
Commercial / Retail						
CR 1	25		25		25	
CR 2			8		17	
CR 3			9			
Subtotal	25	1.8%	42	2.9%	42	2.9%
Commercial / Office						
CO 1	17					
Subtotal	17	1.2%	0	0.0%	0	0.0%
Business Park						
BP 1	69		34		33	
BP 2			11		21	
BP 3			9		72	
BP 4			31			
BP 5			74			
Subtotal	69	4.8%	159	11.2%	126	8.8%
Light Industrial						
HQ-Assembly	194		200		184	
Bulk Warehouse	231		123		123	
Logistics	42		95		95	
Light Industrial	106		50		67	
Subtotal	573	40.2%	468	32.8%	469	32.9%
Public / Institutional						
Inst 1	36		18		33	
Inst 2	40					
Inst 3						
Library					2	
Faith Based 1	30		43		18	
Faith Based 2					11	
Subtotal	106	7.4%	61	4.3%	64	4.5%
Northern Green Space / Buffer	23	1.6%	23	1.6%	23	1.6%
Roads / Transportation R.O.W.	111	7.8%	88	6.2%	98	6.9%
Parks / Green Space	166	11.6%	278	19.5%	273	19.1%
U.S. Army	183	12.8%	183	12.8%	183	12.8%
Total	1426	100%	1426	100%	1426	100%



A. Land Use Plan

The preferred alternative for the comprehensive reuse plan became Alternative A. Since economic growth and job creation were the primary needs of the community, this was the obvious choice. At the same time, amenities and supportive uses were included to retain the quality of life the community desires. These latter uses were drawn from the other alternatives studied. Forest Park desperately needs an economic engine to regenerate its present economic condition. This plan will be the catalyst to accomplish it.

As noted in the Introduction, when the LRA Board approved Alternative A as the Preferred Alternative, they mandated a road modification to the plan. The modification requires that Main Street connect to Hood Avenue and transit through the property tying into the road through the residential area. The Board recognizes that this changes the present Army enclave boundaries. However, this change is so necessary to the ease of access from the West, that it is included in order to commence a dialogue with the Army to create this corridor. This modification adds to the highest and best use of the property.

The next sections provide a brief description of each alternative and its graphic portrayal. Alternatives B and C are included as examples of the other scenarios studied.

Alternative A

The focus of this plan is long-term economic growth and job creation. It is designed to meet the criteria for an EDC that permits the community to control its economic development.

Light, clean industries with high-salaried jobs are the emphasis, though additional jobs will come from commercial, business parks and retail development. The industrial areas are flexible enough to include assembly, distribution, logistics and warehousing. Industrial operations will have easy access to surrounding interstates, rail and air transportation.

New commercial activities in attractive business parks can support the Army enclave and open the way for new development. Retail will support the new developments and add to the existing base in Forest Park. At the same time care was taken not to hinder the enhancement of the city's Main Street development, but to continue its growth.

Green space and institutional uses provide amenities to the total reuse. Institutional parcels could be made available to support a new educational campus. Environmental conditions dictated the location of some of the green space parcels.

Alternatives B & C

The sub-committees at the initial workshop developed alternatives B and C from draft concepts prepared. They were refined and utilized to test market demand, transportation routes, economic development, etc. During the refinement process certain of the concepts, quality of life in particular, were transferred to the preferred alternative. As the refinement progressed, these plans become much closer to each other in scope. There are acreage and location variations.

These plans emphasize institutional uses for education, public safety, tourism venues and flexibility for future growth plus quality of life. Economic growth and job creation continue to be important factors



A very important feature is the extension of Main Street into the development so that Hood Avenue would be the southern boundary of the Army enclave. The land south of this road would be open to the city for development. This feature is added to reflect ongoing possible negotiations with the Army to consider a reduction of their boundaries to permit the best transportation route for access. The present Army boundaries restrict the transportation corridor to much less than optimum.

The three Alternative Land Use Plans are shown beginning on the next page.



B. Transportation & Circulation

The purpose of the transportation planning component of the master plan is to identify the necessary transportation infrastructure for each of the three alternatives as well as their respective costs. Background research of various plans, programmed improvements, and proposed developments was conducted in addition to some preliminary traffic count data collection to identify current traffic conditions in the vicinity of the project. Trip generation based on the Institute of Transportation Engineers' (ITE) Trip Generation Manual, Seventh Edition, 2003 was conducted for each of the three alternatives to determine the overall volumes projected to be generated by each alternative. These projected traffic volumes were then distributed throughout the development's internal study network in order to determine the anticipated size and character of each roadway. Finally, an opinion of probable cost was prepared for the roadway systems and intersections for each alternative.

The opinion of probable cost included in this report refers specifically to roadways internal to the development. It is likely that because of the magnitude of this development, other roadway improvements will be necessary on the external roadway network. These external network costs, currently unknown, are in addition to any costs discussed in this report.

Conclusions

Following the review of the three proposed alternatives, it is anticipated that all three plans are feasible with respect to transportation infrastructure. The three plans generate similar magnitudes of daily trips and have similar potential costs with respect to transportation infrastructure. Additionally, all three plans would likely require additional external roadway improvements that have not been included in the listed costs. While the site layout of each of the plans would require some refinement, all three plans have the potential to work acceptably internal to the site.

1. Inventory & Data Collection

The Fort Gillem Redevelopment site is located to the south of I-285 in Forest Park, Georgia. It is bounded on the east by SR 42 (Moreland Avenue) and on the west by SR 54 (Jonesboro Road). The development does not border Forest Parkway; however, it is located just to the north of it. In conjunction with the redevelopment of the site, a new road will be constructed that connects Anvil Block Road and Moreland Avenue with Forest Parkway through the site.

A review of local plans and studies was conducted to better understand the anticipated developments in the area as well as any programmed improvements. The table below lists projects of interest and their potential impacts to the Fort Gillem Redevelopment site. The roadway widening of SR 42 near the site will provide additional roadway capacity that will be beneficial to the development. Additionally, the proposed transit routes, specifically the Atlanta to Macon Commuter Rail Line, have the potential to make this site very attractive for both residents and employees. While the commuter rail line would access the far west edge of the property, a shuttle bus or circulator could provide transit connections to the rail line from the entire development.

Further intersection analyses of nearby intersections will be necessary after the final determination of an alternative. The traffic generated by the site will likely have an effect on the adjacent roadway network, and those effects can be better understood after a defined site plan has been established.



Review of Local Plans and Studies

Discussion Topic	Description	Potential Impact
Gateway Village	165-acre site with hotel, conference center, office space, and multi-modal passenger rail station	More jobs that could increase residential demands
Mountain View Development	400-acre site with commercial and retail space	Competition with other developments in the area
Hartsfield-Jackson Atlanta International Airport Noise Study	Noise levels; airport expansion	Decline in property value in Northern Forest Park
State Farmers Market	Redevelopment to include direct tie into Airport through MARTA	Increased tourism and retail space
Atlanta to Macon Commuter Rail Line	Commuter Rail line connecting Atlanta to Lovejoy and Macon	Viable transit opportunities for commuters to and from the Fort Gillem site
C-Tran and GRTA Express Bus Routes	Local and express bus routes along SR 54, SR 42, and SR 331	Improved transit opportunities for local travel as well as commutes into the City of Atlanta
Forest Park Sidewalks to School	Sidewalk routes constructed for students to walk to school in Forest Park	Enhanced pedestrian safety specifically for students going to and from school
Forest Park Transit Village TOD	Commuter rail station	Increased mobility to regional destinations
Jonesboro Road (SR 54)	Commercial space is encroaching on residential space	Residents may seek to relocate
I-75/SR 54 Interchange	Widening on SR 54 over I-75 to 8 lanes	Improved traffic flow from I-75
Conley Road Upgrades	Widening of Conley Road from Old Dixie to SR 42; Interchange @ I-285	Improved east/west connectivity north of Fort Gillem between I-285 and SR 42
SR 42 Upgrades	Widening of SR 42 from Lake Harbin to Anvil Block Road	Improved north/south capacity east of Fort Gillem
Main Street Corridor	Added sidewalks and other streetscape amenities	Enhanced accessibility and appearance

Traffic Data Collection

Turning movement counts and 24-hour tube counts were conducted both internal and external to the existing Fort Gillem site. Turning movement counts were conducted at the three primary entrances to the base: Jonesboro Road gate, Anvil Block Road gate, and Flankers Metcalf Road gate. 24-hour tube counts were also conducted along the major roadways in the vicinity of the site. The external counts and tubes were conducted as noted below:

- 1) Jonesboro Road gate:
 - TMCs: 6-9 AM, 11 AM - 1 PM, 3-6 PM
 - Tubes: 24-hours - On SR 42 (north of intersection), on Anvil Block Rd (east of intersection)
- 2) Anvil Block Road gate:
 - TMCs: 6-9 AM, 11 AM - 1 PM, 3-6 PM
 - Tubes: 24-hours - On SR 54 (north of intersection)
- 3) Flankers Metcalf Road gate:
 - TMCs: 6-9 AM, 11 AM - 1 PM, 3-6 PM
- 4) Forest Parkway:
 - Tubes: 24-hours - On SR 54 (north of intersection)



A previous gate access inventory had been conducted by Fort Gillem; those numbers have been included as well. According to this previous inventory, the base at its current state generates approximately 22,000 trips per day. It is important to note that the base is not currently as active as in the past, and thus it generates fewer trips than it may have at one time.

The final tube counts (5) were conducted internal to the base. Because portions of the active base are programmed to remain on-site, it was necessary to capture the number of existing trips being generated by those activities. The tubes were stationed along key driveways and parking lots for 24 hours. The total number of vehicle trips associated with the uses is approximately 2,800 trips per day. Those trips were isolated and reserved for the analysis involving the trip generation due to the new development. All turning movement counts and tube counts can be found in the exhibit on the following page.



2. Trip Generation

In order to determine the size of the roadways within each alternative plan, it was necessary to calculate approximate daily traffic demand along each of the roadways due to surrounding land uses. For each of the plans, traffic demand was calculated for each pod based on the size and land use of the pod as well as agreed upon densities for each of the land uses. Refer to table below for the acreages used for each alternative.

Alternative Concept	A		B		C	
	Acre	%	Acre	%	Acre	%
Single Family Residential - Max. Density 4 Dwelling Units per Acre						
SF 1	37		39		18	
SF 2	42		64		72	
SF 3	34				41	
SF 4	19					
Subtotal	132	9.3%	103	7.2%	131	9.2%
Multi-Family (Med. Density) Residential - Max. Density 10 Dwelling Units per Acre						
MF 1	21		21		17	
Subtotal	21	1.5%	21	1.5%	17	1.2%
Commercial / Retail						
CR 1	25		25		25	
CR 2			8		17	
CR 3			9			
Subtotal	25	1.8%	42	2.9%	42	2.9%
Commercial / Office						
CO 1	17					
Subtotal	17	1.2%	0	0.0%	0	0.0%
Business Park						
BP 1	69		34		33	
BP 2			11		21	
BP 3			9		72	
BP 4			31			
BP 5			74			
Subtotal	69	4.8%	159	11.2%	126	8.8%
Light Industrial						
HQ-Assembly	194		200		184	
Bulk Warehouse	231		123		123	
Logistics	42		95		95	
Light Industrial	106		50		67	
Subtotal	573	40.2%	468	32.8%	469	32.9%
Public / Institutional						
Inst 1	36		18		33	
Inst 2	40					
Inst 3						
Library					2	
Faith Based 1	30		43		18	
Faith Based 2					11	
Subtotal	106	7.4%	61	4.3%	64	4.5%
Northern Green Space / Buffer	23	1.6%	23	1.6%	23	1.6%
Roads / Transportation R.O.W.	111	7.8%	88	6.2%	98	6.9%
Parks / Green Space	166	11.6%	278	19.5%	273	19.1%
U.S. Army	183	12.8%	183	12.8%	183	12.8%
Total	1426	100%	1426	100%	1426	100%



The alternative concepts dated May 31, 2007 were utilized for this analysis. The following densities were assumed for each land use:

Single-Family Residential: 4 Units / Acre	Business Park:	0.30 FAR
Multi-Family Residential: 10 Units / Acre	Light Industrial:	0.34 FAR
Commercial / Retail: 0.40 FAR	Public / Institutional:	Variable
Commercial / Office: 0.38 FAR	Parks / Green space:	N/A

By converting the acreage of each land use pod to square feet and multiplying by its assumed density, a total number of dwelling units or square footage of development was calculated for each pod. These development intensities were then used as the basis for all vehicular trip generation. Traffic projections for all land uses were calculated using equations contained in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, Seventh Edition, 2003. The following ITE land uses were used for each of the alternative plans:

Single-Family Residential:

Land Use 210 – Single-Family Detached

Multi-Family Residential:

Land Use 220 – Apartment

Commercial / Retail:

Land Use 820 – Shopping Center

Commercial / Office:

Land Use 710 – General Office Building
(Retail was assumed to be a one-story land use with little effect on traffic)

Business Park:

Land Use 750 – Office Park

Light Industrial:

Land Use 130 – Industrial Park

Public Institutional:

Land Use 520 – Elementary School
Land Use 522 – Middle School / Junior High School
Land Use 560 – Church
Land Use 590 – Library
Police / Fire Station
(Trip generation for the schools was based on approximate numbers of students instead of building square footage. No trip generation information exists for police/fire stations; however, the land use is not expected to create significant traffic and was therefore not estimated.)

Parks / Green space:

Land Use 412 – County Park

Gross trips generated by each of the development alternatives are represented in the exhibits beginning on the next page.



Trip Generation – Alternative A

Tract #	Land Use Code	Land Use Description	Intensity	Intensity Units	Daily	AM Peak Hour		PM Peak Hour			
					Trips	Total	In	Out	Total	In	Out
HQ-Assembly	130	Industrial Park	2,873,218 s.q. ft		14,504	1,067	875	192	2,227	468	1,759
Bulk Warehouse	130	Industrial Park	3,421,202 s.q. ft		17,271	1,270	1,042	229	2,651	557	2,095
Logistics	130	Industrial Park	622,037 s.q. ft		3,140	231	189	42	482	101	381
Light Industrial	130	Industrial Park	1,569,902 s.q. ft		7,925	583	478	105	1,217	255	961
SF 1	210	Single-Family Detached Housing	148 units		1,347	106	27	80	134	85	50
SF 2	210	Single-Family Detached Housing	168 units		1,529	121	30	90	152	96	56
SF 3	210	Single-Family Detached Housing	136 units		1,238	98	24	73	123	78	46
SF 4	210	Single-Family Detached Housing	76 units		692	55	14	41	69	43	25
MF 1	220	Apartment	210 units		1,412	107	21	86	133	86	47
Parks / Greenspace	412	County Park	166 Acres		378	2	2	0	10	4	6
Inst 1	522	Middle School/Junior High School	800 students		1,296	404	222	182	120	62	58
Inst 2	520	Elementary School	800 students		1,032	296	163	133	204	92	112
Inst 3	-	Fire/Police	-		-	-	-	-	-	-	-
Library	590	Library	0 s.q. ft		0	0	0	0	0	0	0
Faith Based 1	560	Church	65,340 s.q. ft		595	47	25	22	43	22	21
Faith Based 2	560	Church	0 s.q. ft		0	0	0	0	0	0	0
CO 1	710	Office/Commercial	281,398 s.q. ft		2,959	429	378	51	394	67	327
BP 1	750	Office Park	901,692 s.q. ft		9,805	1,374	1,223	151	1,197	168	1,029
BP 2	750	Office Park	0 s.q. ft		0	0	0	0	0	0	0
BP 3	750	Office Park	0 s.q. ft		0	0	0	0	0	0	0
BP 4	750	Office Park	0 s.q. ft		0	0	0	0	0	0	0
BP 5	750	Office Park	0 s.q. ft		0	0	0	0	0	0	0
CR 1	820	Shopping Center	435,600 s.q. ft		17,674	378	231	147	1,653	793	860
CR 2	820	Shopping Center	0 s.q. ft		0	0	0	0	0	0	0
CR 3	820	Shopping Center	0 s.q. ft		0	0	0	0	0	0	0
Total					82,797	6,567	4,944	1,623	10,810	2,977	7,833



Trip Generation – Alternative B

Tract #	Land Use Code	Land Use Description	Intensity	Intensity Units	Daily	AM Peak Hour			PM Peak Hour		
					Trips	Total	In	Out	Total	In	Out
HQ-Assembly	130	Industrial Park	2,962,080 s.q. ft		15,012	1,153	945	207	2,299	483	1,816
Bulk Warehouse	130	Industrial Park	1,821,679 s.q. ft		9,232	709	581	127	1,414	297	1,117
Logistics	130	Industrial Park	1,406,988 s.q. ft		7,130	547	449	98	1,092	229	863
Light Industrial	130	Industrial Park	740,520 s.q. ft		3,753	288	236	52	575	121	454
SF 1	210	Single-Family Detached Housing	156 units		1,448	113	28	84	145	91	54
SF 2	210	Single-Family Detached Housing	256 units		2,377	185	47	139	238	150	88
SF 3	210	Single-Family Detached Housing	0 units		0	0	0	0	0	0	0
SF 4	210	Single-Family Detached Housing	0 units		0	0	0	0	0	0	0
MF 1	220	Apartment	210 units		1,412	107	21	86	133	86	47
Parks / Greenspace	412	County Park	278 Acres		634	3	2	1	17	7	10
Inst 1	522	Middle School/Junior High School	800 students		1,296	404	222	182	120	62	58
Inst 2	520	Elementary School	0 students		0	0	0	0	0	0	0
Inst 3	-	Fire/Police	-		-	-	-	-	-	-	-
Library	590	Library	0 s.q. ft		-	-	-	-	-	-	-
Faith Based 1	560	Church	93,654 s.q. ft		853	67	36	31	62	32	30
Faith Based 2	560	Church	0 s.q. ft		0	0	0	0	0	0	0
CO 1	710	Office/Commercial	0 s.q. ft		0	0	0	0	0	0	0
BP 1	750	Office Park	444,312 s.q. ft		4,717	593	527	65	560	78	482
BP 2	750	Office Park	143,748 s.q. ft		1,526	192	171	21	181	25	156
BP 3	750	Office Park	117,612 s.q. ft		1,249	157	140	17	148	21	128
BP 4	750	Office Park	405,108 s.q. ft		4,301	540	481	59	511	72	439
BP 5	750	Office Park	967,032 s.q. ft		10,267	1,290	1,148	142	1,219	171	1,049
CR 1	820	Shopping Center	435,600 s.q. ft		14,740	308	188	120	1,386	665	721
CR 2	820	Shopping Center	139,392 s.q. ft		4,717	98	60	38	444	213	231
CR 3	820	Shopping Center	156,816 s.q. ft		5,306	111	68	43	499	240	260
Total					89,970	6,864	5,349	1,515	11,043	3,043	8,000



Trip Generation – Alternative C

Tract #	Land Use Code	Land Use Description	Intensity	Intensity Units	Daily	AM Peak Hour			PM Peak Hour		
					Trips	Total	In	Out	Total	In	Out
HQ-Assembly	130	Industrial Park	2,725,114 Acres		13,810	1,060	869	191	2,115	444	1,671
Bulk Warehouse	130	Industrial Park	1,821,679 Acres		9,232	708	581	127	1,414	297	1,117
Logistics	130	Industrial Park	1,406,988 Acres		7,130	547	449	98	1,092	229	863
Light Industrial	130	Industrial Park	992,297 Acres		5,029	386	316	69	770	162	608
SF 1	210	Single-Family Detached Housing	72 units		656	52	13	39	65	41	24
SF 2	210	Single-Family Detached Housing	288 units		2,623	207	52	155	262	165	97
SF 3	210	Single-Family Detached Housing	164 units		1,494	118	29	88	149	94	55
SF 4	210	Single-Family Detached Housing	0 units		0	0	0	0	0	0	0
MF 1	220	Apartment	170 units		1,172	87	17	70	111	72	39
Parks / Greenspace	412	County Park	273 Acres		622	3	2	1	16	7	9
Inst 1	522	Middle School/Junior High School	800 students		1,296	404	222	182	120	62	58
Inst 2	520	Elementary School	0 students		0	0	0	0	0	0	0
Inst 3	-	Fire/Police	-		-	-	-	-	-	-	-
Library	590	Library	43,560 s.q. ft		2,011	52	37	15	258	124	134
Faith Based 1	560	Church	39,204 s.q. ft		357	28	15	13	26	14	12
Faith Based 2	560	Church	23,958 s.q. ft		218	17	9	8	16	8	8
CO 1	710	Office/Residential	0 s.q. ft		0	0	0	0	0	0	0
BP 1	750	Office Park	431,244 s.q. ft		4,601	597	531	66	550	77	473
BP 2	750	Office Park	274,428 s.q. ft		2,928	380	338	42	350	49	301
BP 3	750	Office Park	940,896 s.q. ft		10,038	1,302	1,159	143	1,199	168	1,031
BP 4	750	Office Park	0 s.q. ft		0	0	0	0	0	0	0
BP 5	750	Office Park	0 s.q. ft		0	0	0	0	0	0	0
CR 1	820	Shopping Center	435,600 s.q. ft		14,740	308	188	120	1,386	665	721
CR 2	820	Shopping Center	296,208 s.q. ft		10,023	209	128	82	943	453	490
CR 3	820	Shopping Center	0 s.q. ft		0	0	0	0	0	0	0
Total					87,977	6,464	4,954	1,510	10,842	3,131	7,711



Several types of trip reductions are possible but have not been included in these calculations, in order to obtain a more conservative estimate of traffic volume. The reductions that may occur include internal capture, alternative mode, and pass-by; they are discussed in more detail below.

Because of the mixed-use nature of the development, internal capture between uses may occur. For example, a resident of the development may walk to a nearby restaurant for dinner instead of driving to a remote location. In this instance, two less vehicular trips have been made (to and from the restaurant).

The project site is located along a proposed commuter train route. If this commuter train is eventually constructed, it has potential to reduce residential trips leaving the development to commute into the City of Atlanta, work commute trips of those coming to the site from the north and south, trips to Hartsfield Jackson Atlanta International Airport, and even other recreational trips to locations along the rail line. Additionally, anyone accessing the development through other public transit services, biking, or walking will effectively reduce the numbers of vehicular trips on the roadways. Freight lines are proposed to access the site and have potential to decrease the number of truck trips into the industrial areas of the site. These are all considered to be alternative mode reductions.

With respect to the external roadway network, some trips to the retail components of the development will be made by people already driving along Moreland Avenue, Jonesboro Road, Forest Parkway, and Main Street. These patrons to the development are not new to the external roadway network even though they are new to the development. These trips are known as pass-by trips.

All of the aforementioned trip reductions are likely within this development; however, they have not been assumed in order to maintain a conservative analysis. It is important to note that with the construction of the internal roadway system, there will likely be diverted (cut-through) trips between the major roadways. These cut-through trips may mitigate the effects of the increased traffic on the external roadway network since they will be relocated from the major arterials and their intersections to the internal roads. While the effects on the external roadways may be slightly alleviated, the additional traffic on the internal roadways may result in a need for greater capacity (larger internal roadways). More extensive traffic count information would be necessary to develop an understanding of how many trips would be diverted onto the new roadways, but it is probable that these trips would exist. The lack of trip reductions mentioned above will likely offset many of the diverted trips using the roadway network as a cut-through between major roads.

3. Trip Distribution and Assignment

General trip distributions were determined based on area land uses, existing traffic counts, the locations of proposed land uses, and engineering judgment. Four distributions were created for each alternative based on the types of trip being made: residential, office/industrial, commercial/institutional, and green space. Each land use pod, based on the amount of development included, was incorporated into the distribution for that land use type. Its trips were then assigned to the roadway network given the general trip distributions established. Multiple access points to each pod were assumed, and any trips that accessed even a portion of a link were included in the total volume for that link.



Following the completion of all distributions, the percentages were multiplied by the total daily trips generated by the land use category and volumes were determined for each roadway link. The summation of all roadway volumes by land use represents the total projected new trips on each link. The final addition to the link volumes was the redistributed traffic from the U.S. Army site. The approximately 2,800 trips generated by the U.S. Army use were assigned to the network based on the general distributions and the assumption of two U.S. Army access points: the first access point was assumed to be along Jonesboro Road and the second was assumed to be along the northern industrial roadway.

Determination of Roadway Capacity and Characteristics

Following the calculation of projected daily volume per segment, the typical section of each roadway could be determined based on the capacity necessary to meet the projected demand. According to the Florida Department of Transportation 2002 Quality / Level of Service Handbook's Generalized Annual Average Daily Volumes Table, the following daily volumes can be accommodated on two-, four-, and six-lane facilities:

2-lane (undivided):	14,600 vehicles / day
4-lane (divided)	31,100 vehicles / day
6-lane (divided)	46,800 vehicles / day

These volumes were used as guidelines for determining the numbers of travel lanes necessary along each of the roadway segments in the three alternatives and are shown in the exhibits beginning on the next page. For Alternatives A, B and C, they show the projected non-directional traffic volumes and the number of lanes necessary to accommodate the link demand. Many of the minor roadways between parcels only require a two-lane facility to serve the uses. Most of the major roadways require four lanes to adequately serve the demand. In all three plans, the roadway leading from Moreland Avenue / Anvil Block Road requires six travel lanes. Because this is the primary access point from the east side of the property with access to I-675, it is anticipated that this roadway will carry considerable volumes of traffic, a large percentage of which may be industrial freight traffic. When more detailed design of the site occurs, an additional spur into the industrial pods of the development may help to alleviate some of the traffic on this segment. Additional roadways will likely be necessary between uses on Alternative A; however, these roadways were not included to maintain consistency across analyses.

In addition to determining the number of lanes necessary to meet the projected vehicular demand, it is also important to determine the character of the roadways and their purpose. The roadways whose primary purpose is to serve the industrial traffic have a different character than roadways like the Main Street extension that will serve vehicles accessing the residential, commercial, and institutional uses as well as pedestrians walking between them. Five types of roadways have thus been identified on each of the plans: 2-Lane, 4-Lane, and 6-Lane Industrial as well as 2-Lane and 4-Lane Mixed Use. The roadways intended to serve more than just vehicular uses on a consistent basis were identified as mixed-use roadways and incorporate additional pedestrian-friendly design elements that will be discussed further in the opinions of probable cost section.



4. Opinion of Probable Costs

The final component of the review is the opinion of probable construction cost of the transportation infrastructure required in conjunction with each plan. Individual components of each of the five roadway types, as detailed below, were identified and entered into a worksheet. The approximate associated costs are listed below on a per mile basis.

2-Lane Industrial (\$1.9 million /mile):

- 2 - 12' travel lanes
- 2 - 4' paved shoulders

2-Lane Mixed Use (\$2.3 million /mile):

- 2 - 12' travel lanes
- 2 - Curb and Gutter
- 2 - 6' Grass Buffers
- 2 - 6' Sidewalks

4-Lane Industrial (\$4.1 million /mile):

- 4 - 12' travel lanes
- 2 - 4' paved shoulders
- 1 - 14' two-way left-turn lane

4-Lane Mixed Use (\$4.6 million /mile):

- 4 - 12' travel lanes
- 2 - Curb and Gutter
- 2 - 6' Grass Buffers
- 2 - 6' Sidewalks
- 1 - Raised Median

6-Lane Industrial (\$5.5 million /mile):

- 6 - 12' travel lanes
- 2 - 4' paved shoulders
- 1 - 14' two-way left-turn lane

Beginning on the next page, Table 1 summarizes the approximate construction costs associated with each of the plans while Tables 2-6 show individual breakdowns associated with each typical roadway section.

- Alternative A contains approximately 9.4 total miles of roadway for a cost of \$34.1 million
- Alternative B contains approximately 7.2 total miles of roadway for a cost of \$27.3 million
- Alternative C contains approximately 7.7 total miles of roadway for a cost of \$28.9 million.

Table 1 also displays the anticipated construction cost for intersection signalization for each of the plans. At a general assumed cost of \$130,000 per signalized intersection that does not assume mast arms or video detection, Alternative A is anticipated to cost \$0.8 million (6 intersections), Alternative B is anticipated to cost \$1.3 million (10 intersections), and Alternative C is anticipated to cost \$1.4 million (11 intersections).



Table 1: Summary

Typical Roadway	Cost/Mile	Alternative A		Alternative B		Alternative C	
		# Miles	Total Cost	# Miles	Total Cost	# Miles	Total Cost
Table 6: 2-Lane Industrial	\$1,864,000	1.5	\$2,824,000	0.9	\$1,765,000	2.1	\$3,883,000
Table 7: 2-Lane Mixed Use	\$2,252,000	1.9	\$4,265,000	1.4	\$3,199,000	0.3	\$640,000
Table 8: 4-Lane Industrial	\$4,103,000	2.7	\$10,879,000	1.2	\$5,051,000	1.7	\$6,994,000
Table 9: 4-Lane Mixed Use	\$4,557,000	2.2	\$9,925,000	2.7	\$12,083,000	2.6	\$11,651,000
Table 10: 6-Lane Industrial	\$5,505,000	1.1	\$6,256,000	0.9	\$5,213,000	1.0	\$5,734,000
Total Roadway		9.4	\$34,149,000	7.2	\$27,311,000	7.7	\$28,902,000

Intersection Control	Cost/Intersection	Alternative A		Alternative B		Alternative C	
		# Intersections	Total Cost	# Intersections	Total Cost	# Intersections	Total Cost
Signalization	\$130,000	6	\$780,000	10	\$1,300,000	11	\$1,430,000

Total Transportation Infrastructure Cost **\$34,929,000** **\$28,611,000** **\$30,332,000**

Assumptions:

1. Estimate does not include landscape items - i.e. trees, street lights, benches, etc.
2. New drainage structures are placed every 300 feet along raised median. Unit costs for drainage structures / pipe along the outside of the road are included in the stormwater estimations.
3. Unit Costs are based on current GDOT Unit Price data
4. Estimate does not include escalation
5. Signal opinions do not assume the use of mast arms or vehicle detection

The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.



Table 2: 2-Lane Industrial

Total Pavement Width (Feet)	32
Sidewalk Width Left (Feet)	0
Sidewalk Width Right (Feet)	0
Grass Strip Width Left (Feet)	0
Grass Strip Width Right (Feet)	0
Curb and Gutter (Y/N)	N
Raised Median (Y/N)	N
Center Turn Lane (Y/N)	N
Travel Lanes	2
Bike Lanes	0
Transit Lanes	0
On-Street Parking Lanes	0

Item	Units	Unit Cost	Units/Mile	Cost/Mile
Asphalt Surface Course	TN	\$90	1549	\$139,392
Asphalt Binder Course	TN	\$90	2065	\$185,856
Asphalt Base Course	TN	\$90	6195	\$557,568
Graded Aggregate Base	TN	\$20	12954	\$259,072
Tack Coat	GL	\$2	2628	\$5,257
Concrete Curb and Gutter, 6 In x 30 In	LF	\$20	0	\$0
New Drainage Structures	EA	\$5,000	0	\$0
Storm Drain Pipe, 24 In	LF	\$60	0	\$0
Concrete Sidewalk, 4 In	SY	\$45	0	\$0
Thermoplastic Pvmnt Marking - Center Turn Arrows	EA	\$150	0	\$0
Thermoplastic Pvmnt Marking - Bike Symbol	EA	\$150	0	\$0
Thermoplastic Pvmnt Stripe, 5 In White	LF	\$1	0	\$0
Thermoplastic Pvmnt Stripe, 5 In Yellow	LF	\$1	10560	\$10,560

Total Unit Cost/Mile \$1,157,705

Clearing / Grubbing, Earthwork, Stabilization	LS	(40% of cost/mile)	\$463,082
Contingency	LS	(15% of total cost)	\$243,118

Total Cost/Mile	\$1,863,904
------------------------	--------------------

Assumptions:

1. Estimate does not include landscape items - i.e. trees, street lights, benches, etc.
2. New drainage structures are placed every 300 feet along raised median. Unit costs for drainage structures / pipe along the outside of the road are included in the stormwater estimations.
3. Unit Costs are based on current GDOT Unit Price data
4. Estimate does not include escalation



Table 3: 2-Lane Mixed Use

Total Pavement Width (Feet)	24
Sidewalk Width Left (Feet)	6
Sidewalk Width Right (Feet)	6
Grass Strip Width Left (Feet)	6
Grass Strip Width Right (Feet)	6
Curb and Gutter (Y/N)	Y
Raised Median (Y/N)	N
Center Turn Lane (Y/N)	N
Travel Lanes	2
Bike Lanes	0
Transit Lanes	0
On-Street Parking Lanes	0

Item	Units	Unit Cost	Units/Mile	Cost/Mile
Asphalt Surface Course	TN	\$90	1162	\$104,544
Asphalt Binder Course	TN	\$90	1549	\$139,392
Asphalt Base Course	TN	\$90	4646	\$418,176
Graded Aggregate Base	TN	\$20	9715	\$194,304
Tack Coat	GL	\$2	1971	\$3,942
Concrete Curb and Gutter, 6 In x 30 In	LF	\$20	10560	\$211,200
New Drainage Structures	EA	\$5,000	0	\$0
Storm Drain Pipe, 24 In	LF	\$60	0	\$0
Concrete Sidewalk, 4 In	SY	\$45	7040	\$316,800
Thermoplastic Pvmnt Marking - Center Turn Arrows	EA	\$150	0	\$0
Thermoplastic Pvmnt Marking - Bike Symbol	EA	\$150	0	\$0
Thermoplastic Pvmnt Stripe, 5 In White	LF	\$1	0	\$0
Thermoplastic Pvmnt Stripe, 5 In Yellow	LF	\$1	10560	\$10,560

Total Unit Cost/Mile \$1,398,918

Clearing / Grubbing, Earthwork, Stabilization	LS	(40% of cost/mile)	\$559,567
Contingency	LS	(15% of total cost)	\$293,773

Total Cost/Mile \$2,252,259

Assumptions:

1. Estimate does not include landscape items - i.e. trees, street lights, benches, etc.
2. New drainage structures are placed every 300 feet along raised median. Unit costs for drainage structures / pipe along the outside of the road are included in the stormwater estimations.
3. Unit Costs are based on current GDOT Unit Price data
4. Estimate does not include escalation



Table 4: 4-Lane Industrial

Total Pavement Width (Feet)	70
Sidewalk Width Left (Feet)	0
Sidewalk Width Right (Feet)	0
Grass Strip Width Left (Feet)	0
Grass Strip Width Right (Feet)	0
Curb and Gutter (Y/N)	N
Raised Median (Y/N)	N
Center Turn Lane (Y/N)	Y
Travel Lanes	4
Bike Lanes	0
Transit Lanes	0
On-Street Parking Lanes	0

Item	Units	Unit Cost	Units/Mile	Cost/Mile
Asphalt Surface Course	TN	\$90	3388	\$304,920
Asphalt Binder Course	TN	\$90	4517	\$406,560
Asphalt Base Course	TN	\$90	13552	\$1,219,680
Graded Aggregate Base	TN	\$20	28336	\$566,720
Tack Coat	GL	\$2	5749	\$11,499
Concrete Curb and Gutter, 6 In x 30 In	LF	\$20	0	\$0
New Drainage Structures	EA	\$5,000	0	\$0
Storm Drain Pipe, 24 In	LF	\$60	0	\$0
Concrete Sidewalk, 4 In	SY	\$45	0	\$0
Thermoplastic Pvmnt Marking - Center Turn Arrows	EA	\$150	50	\$7,500
Thermoplastic Pvmnt Marking - Bike Symbol	EA	\$150	0	\$0
Thermoplastic Pvmnt Stripe, 5 In White	LF	\$1	10560	\$10,560
Thermoplastic Pvmnt Stripe, 5 In Yellow	LF	\$1	21120	\$21,120

Total Unit Cost/Mile \$2,548,559

Clearing / Grubbing, Earthwork, Stabilization	LS	(40% of cost/mile)	\$1,019,423
Contingency	LS	(15% of total cost)	\$535,197

Total Cost/Mile \$4,103,179

Assumptions:

1. Estimate does not include landscape items - i.e. trees, street lights, benches, etc.
2. New drainage structures are placed every 300 feet along raised median. Unit costs for drainage structures / pipe along the outside of the road are included in the stormwater estimations.
3. Unit Costs are based on current GDOT Unit Price data
4. Estimate does not include escalation



Table 5: 4-Lane Mixed Use

Total Pavement Width (Feet)	48
Sidewalk Width Left (Feet)	6
Sidewalk Width Right (Feet)	6
Grass Strip Width Left (Feet)	6
Grass Strip Width Right (Feet)	6
Curb and Gutter (Y/N)	Y
Raised Median (Y/N)	Y
Center Turn Lane (Y/N)	N
Travel Lanes	4
Bike Lanes	0
Transit Lanes	0
On-Street Parking Lanes	0

Item	Units	Unit Cost	Units/Mile	Cost/Mile
Asphalt Surface Course	TN	\$90	2323	\$209,088
Asphalt Binder Course	TN	\$90	3098	\$278,784
Asphalt Base Course	TN	\$90	9293	\$836,352
Graded Aggregate Base	TN	\$20	19430	\$388,608
Tack Coat	GL	\$2	3942	\$7,885
Concrete Curb and Gutter, 6 In x 30 In	LF	\$20	21120	\$422,400
New Drainage Structures	EA	\$5,000	36	\$180,000
Storm Drain Pipe, 24 In	LF	\$60	3000	\$180,000
Concrete Sidewalk, 4 In	SY	\$45	7040	\$316,800
Thermoplastic Pvmt Marking - Center Turn Arrows	EA	\$150	0	\$0
Thermoplastic Pvmt Marking - Bike Symbol	EA	\$150	0	\$0
Thermoplastic Pvmt Stripe, 5 In White	LF	\$1	10560	\$10,560
Thermoplastic Pvmt Stripe, 5 In Yellow	LF	\$1	0	\$0

Total Unit Cost/Mile \$2,830,477

Clearing / Grubbing, Earthwork, Stabilization	LS	(40% of cost/mile)	\$1,132,191
Contingency	LS	(15% of total cost)	\$594,400

Total Cost/Mile \$4,557,068

Assumptions:

1. Estimate does not include landscape items - i.e. trees, street lights, benches, etc.
2. New drainage structures are placed every 300 feet along raised median. Unit costs for drainage structures / pipe along the outside of the road are included in the stormwater estimations.
3. Unit Costs are based on current GDOT Unit Price data
4. Estimate does not include escalation



Table 6: 6-Lane Industrial

Total Pavement Width (Feet)	94
Sidewalk Width Left (Feet)	0
Sidewalk Width Right (Feet)	0
Grass Strip Width Left (Feet)	0
Grass Strip Width Right (Feet)	0
Curb and Gutter (Y/N)	N
Raised Median (Y/N)	N
Center Turn Lane (Y/N)	Y
Travel Lanes	6
Bike Lanes	0
Transit Lanes	0
On-Street Parking Lanes	0

Item	Units	Unit Cost	Units/Mile	Cost/Mile
Asphalt Surface Course	TN	\$90	4550	\$409,464
Asphalt Binder Course	TN	\$90	6066	\$545,952
Asphalt Base Course	TN	\$90	18198	\$1,637,856
Graded Aggregate Base	TN	\$20	38051	\$761,024
Tack Coat	GL	\$2	7721	\$15,441
Concrete Curb and Gutter, 6 In x 30 In	LF	\$20	0	\$0
New Drainage Structures	EA	\$5,000	0	\$0
Storm Drain Pipe, 24 In	LF	\$60	0	\$0
Concrete Sidewalk, 4 In	SY	\$45	0	\$0
Thermoplastic Pvmnt Marking - Center Turn Arrows	EA	\$150	50	\$7,500
Thermoplastic Pvmnt Marking - Bike Symbol	EA	\$150	0	\$0
Thermoplastic Pvmnt Stripe, 5 In White	LF	\$1	21120	\$21,120
Thermoplastic Pvmnt Stripe, 5 In Yellow	LF	\$1	21120	\$21,120

Total Unit Cost/Mile				\$3,419,477
Clearing / Grubbing, Earthwork, Stabilization	LS	(40% of cost/mile)		\$1,367,791
Contingency	LS	(15% of total cost)		\$718,090
Total Cost/Mile				\$5,505,358

Assumptions:

1. Estimate does not include landscape items - i.e. trees, street lights, benches, etc.
2. New drainage structures are placed every 300 feet along raised median. Unit costs for drainage structures / pipe along the outside of the road are included in the stormwater estimations.
3. Unit Costs are based on current GDOT Unit Price data
4. Estimate does not include escalation



In terms of total transportation infrastructure, the results for each alternative are as follows:

- Alternative A: \$34.9 million
- Alternative B: \$28.6 million
- Alternative C: \$30.3 million

The construction costs mentioned above do not account for probable escalation in cost of construction materials. Extra expenses should be budgeted based on the anticipated build-out year and inflation per year. A 15% contingency has been added to each cost per mile calculation to account for additional roadways and unforeseen construction costs.

Additionally, the only drainage structures included in the transportation opinion of probable cost are those necessary to drain a median. All other curbside inlets and pipes have been assumed as part of the stormwater costs. All three plans are relatively close in probable construction cost; however, the higher cost of Alternative A is a result of the additional roadway mileage associated with the design of the plan.

It is important to also note that additional roadway improvements will most likely be needed on the external roadway network as a result of this development. When a final plan is prepared and permitting is initiated, a Development of Regional Impact (DRI) study will be required as a result of Georgia Regional Transportation Authority (GRTA) and the Atlanta Regional Commission (ARC) policy because the development will exceed 400,000 square feet of mixed-use development. The process may identify additional improvements that have not been included in the opinion of probable costs; however, at this time those improvements and associated costs are unknown.



C. Stormwater Management

The purpose of the stormwater planning component of the master plan is to identify the necessary stormwater infrastructure for each of the three alternatives, including their respective probable costs; as well as other water resources-related concerns. Background research utilizing USGS, FEMA and available survey and topographic maps was conducted in order to determine the existing drainage basin mapping. Clayton County Water Authority as well as the Georgia Stormwater Management Manual was then used to determine the pre-development (existing) and post-development condition for each of the alternatives. Other water resources-related issues were also addressed, including State and County stream buffer regulations and the Georgia Safe Dam Program. Finally, an opinion of probable cost was prepared for the stormwater drainage system (outside of each development pod) as well as the probable costs for each drainage basin assuming above ground extended wet detention for each alternative plan.

The opinion of probable cost included in this report refers specifically to the stormwater drainage internal to the development. It is likely that because of the magnitude of this development and the layout of the topography that offsite stormwater may cross the boundaries of the development. All offsite water that may flow through the site is not included within our calculations.

Conclusions

Following the review of the three proposed alternatives, it is anticipated that all three plans are feasible with respect to stormwater drainage. The existing stream buffers do not greatly impact any of the alternatives but do moderately impact industrial areas in the north-northwest portion of the site. The probable costs associated with all three plans including roadway and basin drainage are within 20% of each other, therefore, no one alternative is significantly more cost effective as it pertains to on-site drainage.

1. Pre-Development Condition

The pre-development condition for Fort Gillem was analyzed using a combination of USGS, existing topographical surveys/ maps and NRCS area soil survey (1993) to determine the drainage basins within the base, which are shown in the exhibit on the following page. The site is a total of 1,454 acres currently developed for industrial uses with open space (park and other) as well as several streams and two lakes. Analysis of the current condition resulted in 23 basins ranging in size from 9-acres to 212-acres. A summary of existing land uses, percent impervious, I, and runoff coefficients, CN, are shown in the table below. The “Type B” and “Type C” land use designations refer to the soil type found in that land use area.

Pre-developed On-site Runoff Coefficients per Land Use

Sub-Area Land Use	Impervious Area, percent	CN	Total Area, acre
Industrial – Type B	72	88	943
Open Space – Type B	0	61	451
Open Space – Type C	0	70	47
Water	100	100	13.2
TOTAL		79	1454



2. Post-Development Condition

There are currently three alternatives for the post-development condition. Each alternative was modeled individually using PondPack 10.0 to determine the pre versus post detention requirements. The City of Forest Park refers to the Clayton County Water Authority and the Georgia Stormwater Management Manual for designing of all stormwater quality and quantity systems. Therefore, each alternative was modeled using the SCS method to determine detention requirements as follows:

1. Stormwater Quality – Defined as the first 1.2” inches of rainfall. Requirement for 80% annual removal of Total Suspended Solids (TSS)
2. Channel Protection Volume – Defined as the first 3.36” of rainfall. Requirement for the protection of stream banks from erosion during medium-sized storm events.
3. Overbank Protection – 25-year storm event
4. Extreme Flood Protection – 100-year storm event

Drainage Designations

Since each alternative is in a master plan state, it was assumed that the topographic layout would remain the same as the pre-existing condition, therefore allowing the pre versus post calculation. It is also assumed that all of the detention facilities will be an extended wet detention pond. This was done to allow for a comparable cost analysis across each land use designation.

Roadway drainage is analyzed a bit differently. Roadway drainage is assumed to be conveyed through curb inlets, down storm pipes and into the detention system within that particular basin. Since we do not have any information about the pods, no costing information was determined for the storm pipe system inside each pod. Roadway storm curb inlets were assumed to be located every 300 LF on both sides of the roads and manhole structures as needed with a minimum of one per basin.

Land Use Designations

Although the three alternatives are different in layout and function, the same variable designations were used for each land use type for the purpose of modeling of the system. A summary of post-development land uses; assumed percent impervious; and runoff coefficients, CN, are shown below. The land use maps dated 5/31/07 from ZHA were utilized in all of the post development calculations. The “Type B” and “Type C” land use designations refer to the soil type found in that land use area. The weighted CN valued for each alternative can be seen on the Excel sheets – “Storm Basin Calculations, Post-A, Post-B and Post-C”.

Post-Developed On-site Runoff Coefficients per Land Use

Sub-Area Land Use	Impervious Area percent	CN
Commercial – B	85	92
Industrial – B	72	88
Institutional – B	85	92
Office Park – B	85	92
Open Space – B	0	61
Open Space – C	0	70
Residential – B	38	75
Multi-Family Residential – B	65	85
Water	100	100



For each of the alternatives, cost information was calculated for each drainage basin as well as the drainage associated with each alternative road system. The addition of both of these numbers is an estimate of the cost associated with the storm water drainage. This rough estimate, however, does not take into effect any alternate or innovative systems that would reduce runoff by infiltration or stormwater reuse. This potentially could reduce these costs significantly.

A summary of that cost information is shown below and on the next page. The cost estimate for each detention basin as outlined in the table below is based upon \$5.00/cubic yard. This is assuming that all levels of stormwater treatment need to be accounted for and that the means for treating the stormwater is in a traditional extended wet detention pond with the water quality volume incorporated into the design. A 15% contingency was added to the probable costs for unforeseeable construction and material costs. Escalation was not included in the estimates.

Fort Gillem Detention Pond Sizes and Opinion of Probable Costs

Sub-Area Basin	Total Area, acres	Alternative A		Alternative B		Alternative C	
		Volume of Pond, cuft	Cost, US Dollar	Volume of Pond, cuft	Cost, US Dollar	Volume of Pond, cuft	Cost, US Dollar
Basin A	36	389,298	\$79,592	391,754	\$80,047	391,754	\$80,047
Basin B	27	291,973	\$61,569	294,958	\$62,122	294,958	\$62,122
Basin C	14	280,183	\$59,386	250,908	\$53,964	250,908	\$53,964
Basin D	44	799,209	\$155,502	605,818	\$119,688	690,482	\$135,367
Basin E	23	106,636	\$27,247	47,685	\$16,331	47,685	\$16,331
Basin F	152	2,004,409	\$378,687	2,054,439	\$387,952	2,054,439	\$387,952
Basin G	22	45,612	\$15,947	45,612	\$15,947	45,612	\$15,947
Basin H	10	20,733	\$11,339	20,733	\$11,339	20,733	\$11,339
Basin I	28	306,937	\$64,340	306,937	\$64,340	306,937	\$64,340
Basin J	20	202,488	\$44,998	183,198	\$41,426	216,541	\$47,600
Basin K	89	1,436,938	\$273,600	1,209,387	\$231,461	1,504,445	\$286,101
Basin L	9	146,779	\$34,681	146,779	\$34,681	146,779	\$34,681
Basin M	24	529,788	\$105,609	529,788	\$105,609	529,788	\$105,609
Basin N	15	80,586	\$22,423	80,586	\$22,423	80,586	\$22,423
Basin O	127	1,834,327	\$347,190	1,606,676	\$305,033	1,858,213	\$351,613
Basin P	146	2,116,125	\$399,375	1,945,342	\$367,748	1,832,786	\$346,905
Basin Q	61	825,642	\$160,397	825,642	\$160,397	829,543	\$161,119
Basin R	97	1,832,180	\$346,793	1,657,955	\$314,529	1,636,173	\$310,495
Basin S	90	1,622,599	\$307,981	1,512,381	\$287,571	1,527,514	\$290,373
Basin T	56	303,703	\$63,741	701,416	\$137,392	368,973	\$75,828
Basin U	212	1,592,228	\$302,357	1,098,943	\$211,008	1,165,811	\$223,391
Basin V	46	414,849	\$84,324	307,007	\$64,353	294,819	\$62,096
Basin W	106	709,021	\$138,800	642,356	\$126,455	797,140	\$155,119
Total	1454	17,82,243	\$4,008,760	16,466,298	\$3,705,087	16,892,619	\$3,795,877



The table below outlines the drainage structures costs for the major road network for each of the alternatives. The storm pipe was calculated based on the volume and flow rate of stormwater that would need to be conveyed along the roadway system. The pipe type was assumed to be reinforced concrete (RCP). In addition to the piping, storm inlets were assumed to be located every three hundred linear feet and on both sides of the road. Manhole structures were included for the intersection of pipes and roadways as well as where large piping systems are anticipated to intersect. The manholes were assumed to be at an 8’ depth on average across the site. Again, a 15% contingency was added to the probable costs for unforeseeable construction and material costs and escalation was not included in the probable costs.

Fort Gillem Storm Drainage Piping and Structures with Opinion of Probable Costs

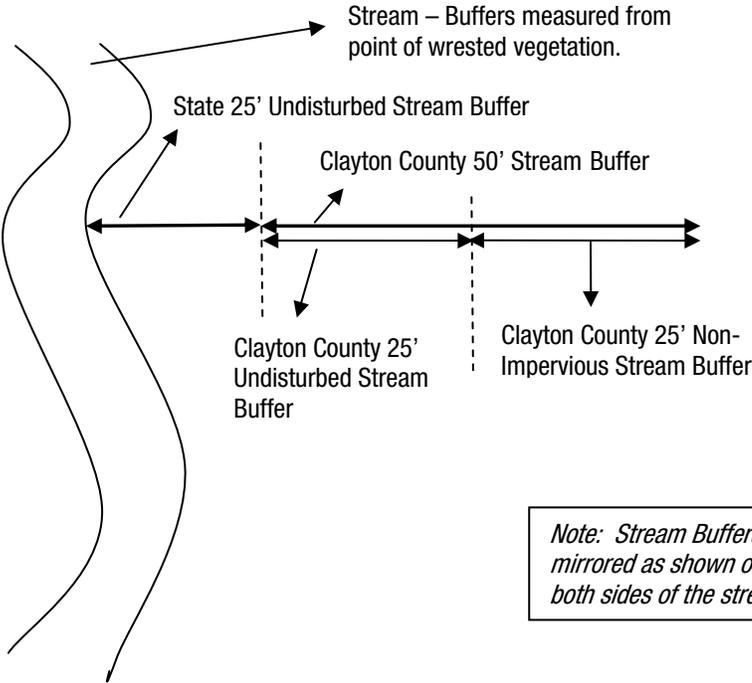
Storm Drainage Structure	Alternative A	Alternative B	Alternative C
Storm Pipe (LF)	37,033	33,860	40,126
Estimated Cost – Storm Pipe	\$3,221,605	\$2,168,450	\$2,724,393
Estimated Cost for Manholes	\$188,800	\$166,400	\$192,000
Storm Curb Inlets	244	228	268
Estimated Cost – Inlets	\$610,000	\$570,000	\$670,000
Opinion of Probable Cost	\$4,623,465	\$3,340,577	\$4,124,352

Total Drainage Probable Costs for each Alternative

Type of Stormwater Drainage	Alternative A	Alternative B	Alternative C
Piping & Structural	\$4,623,460	\$3,340,577	\$4,124,352
Drainage Basins	\$4,008,760	\$3,705,087	\$3,795,877
Total Opinion of Probable Cost	\$8,632,225	\$7,045,664	\$7,920,229

3. Stream Buffer

The City of Forest Park and Clayton County enforce two levels of stream buffers along State waters. A stream buffer is defined from the point of wretched vegetation on either side of a perennial, intermittent or ephemeral stream. The two levels of stream buffers include the State 25-foot undisturbed stream buffer and the Clayton County 50-foot stream buffer. The first 25-feet of the Clayton County stream buffer is a non-disturb buffer, similar to that of the State of Georgia. The next 25-feet are a non-impervious stream buffer. Within the non-impervious buffer, limited grading is typically allowed but no impervious structures may be constructed within this area. This is illustrated on the following page.



Stream Buffer Illustration

4. Georgia Safe Dams Program

The regulations of the Georgia Safe Dams Standards for Dam Safety state that a Category 1 dam means the classification where improper operation or dam failure would result in probable loss of life. These dams are regulated by the Georgia Safe Dams Program (GSDP). In order to be classified as a Category 1 dam, a dam must meet at least one of the following qualifications:

- Twenty-five (25) feet or more in height from the natural bed of the stream at the downstream toe to the maximum water storage elevation.
- An impounding capacity at maximum water storage elevation of one hundred (100) acre-feet or more.

As Fort Gillem is currently a Federal site, any dams located therein are exempted from regulation by the GSDP. With the transfer of a portion of the Fort Gillem property to private property, these lakes will be assessed by the GSDP in order to categorize and regulate them. In a site inspection of the existing Fort Gillem lakes conducted on May 9, 2007 with Fred Bryant, Marchland Lake appears to have a dam height of greater than twenty-five feet. It is recommended that early coordination with GSDP begin to determine the categorization of these dams and any rehabilitation that may be required in order to meet the Georgia Safe Dams Standards for Dam Safety. This process typically takes between 18 to 24 months.

Beginning on the next page are exhibits detailing the Stream Buffers and Storm Drainage Lines for Alternatives A, B and C.

Detailed Excel spreadsheets created in conducting the Storm Basin Analysis and Storm Infrastructure Analysis are provided on the CD that accompanies this submittal.



D. Sanitary Sewer

Sewer service is currently provided to the base by a combination of gravity sewers and force mains. At one time, three separate treatment (or pre-treatment) facilities treated domestic and industrial wastewater on the base prior to discharge. These plants have been decommissioned, and the wastewater is currently conveyed to a single point on the northwest corner of the base and discharged to the Clayton County Water Authority (CCWA) collection system. Flows from the base are conveyed to the Snapfinger WWTP, owned by the DeKalb County GA Water and Sewer Authority (WSA). DeKalb County treats the wastewater on a contract basis for CCWA. The collection system within the Fort Gillem enclave (to remain after re-development) is largely a gravity system, while the areas to be redeveloped are served by small sewage lift stations and force mains. The gravity portions of the system are mostly vitrified clay lines, and the force mains are cast iron pipe. The eastern portions of the gravity system date from the construction of the base (1940's) and are sized for small sanitary flows from storage warehouses. The lift stations are of more recent construction but also are sized for small flows.

Planning Constraints

The gravity lines, pump stations, and force mains on the eastern side of the base (to be redeveloped) are of little practical use in the redeveloped base and can easily be replaced with modern systems sized for the new developments. However, the sections serving the points of contact with the CCWA collection system are larger and may be of use in the redeveloped base. In addition, the point of contact with the CCWA system is unlikely to change in the near future, due to a general lack of large collection systems in the area. Therefore, the only planning constraints presented by the sewer system are the large lines near the point of contact on the northwestern part of the site.

Potential Worth for Reuse

The existing sewer system has been designed and maintained for use by Fort Gillem, and most of the system will not fit the needs of the realignment plan. The large parts of the system (10-inches and larger) near the point of contact with the CCWA system may be worth preserving for reuse, depending on the required flow capacities.

Assessment for Alternatives

The existing sanitary sewer system within Fort Gillem is composed of a combination of gravity flow lines and pump stations and associated force mains. There are also separate septic tanks/drain fields located within certain areas of the site that could not be supported by the existing sewer system. Originally the existing sanitary sewer system flowed to two on-site sewage treatment plants, one at the northeast corner of the property and the other at the northwest corner of the property. Both sewage treatment plants have since been abandoned and all flow directed to the northwest corner of the property has been redirected. The sanitary sewer flow is currently piped by a system of off-site public sewers to the Snapfinger Wastewater Treatment Plant (WWTP) that is operated by Dekalb County Water & Sewer. From discussions with the plant operators, the current capacity of the plant is 36 million gallons per day (MGD) with the plant currently operating at 28-30 MGD. Estimated peak sanitary sewer demand for the existing conditions is 153,000 gallons per day (gpd) based upon approximately 1,800 active and civilian employees and 20 residential units on site.



Proposed Sanitary Sewer System & Demand

The study to determine estimated proposed sanitary sewer flow demands and corresponding trunk line sizes was developed based upon Alternatives A, B, and C, dated May 31, 2007. Hydraulic design and sanitary sewer design flow rates were based upon Clayton County Water Authority specifications included with this document. Flow rates were assigned to each land use for each proposed alternative with flows generated based on density and acreage. The sanitary sewer systems for each alternative are shown in the exhibits following this page.

Each of the alternatives uses a system of gravity flow lines and pump stations/force mains as shown in the attached exhibits and spreadsheets. Sizes are based on flows generated, estimated pipe slopes and the assumptions that the pipes will flow half full. The different land uses are indicated with an arrow indicating each entry node. A few upstream nodes are noted as receiving no flow but were included in the spreadsheet for pricing purposes. The nodes should receive flow in the actual conditions after roadway profiles and adjacent property grading have been established. Estimated peak sanitary sewer flow from the future Army portion of the property is 37,500 gallons per day based upon 250 employees and 20 residential units.

Estimated Peak Sanitary Sewer Demand

- Alternative A – 6.4 MGD
- Alternative B – 5.9 MGD
- Alternative C – 5.8 MGD

Estimated Costs for Proposed Systems (Estimate does not include service lines/taps nor distribution systems within the individual site zones.

- Alternative A – \$5.6 million
- Alternative B – \$4.9 million
- Alternative C – \$4.7 million

Future Design Work

More in-depth design of the sanitary sewer design and layout can be undertaken as the roadway horizontal and vertical alignments and pods are further developed. Further development of the land uses and densities will also further substantiate the sanitary sewer design and support a more detailed cost estimate.



E. Water Supply

The existing water distribution system within Fort Gillem is separate from the Clayton County Water Authority (CCWA) system. The onsite system is owned, maintained and operated by the Army. The water needed to operate the Fort Gillem system is purchased from the Clayton County Water Authority. The Fort's water is metered by two CCWA meters located at the west and east gates. The water pressure gradient within the fort property is independent of the CCWA system.

The Fort Gillem on-site water distribution system consists of two separate systems: a fire suppression water system and a potable water service. The fire suppression water distribution system is the older of the two systems and consists mostly of cast iron mains. The potable water system is newer and consists of small size plastic pipes. There are also four water storage tanks (two are elevated and two are at ground level). The combined capacity of the tanks is in excess of 1,000,000 gallons. The tanks are of different ages and are mainly used for fire water storage; the condition of the tanks is unknown.

Included below are results from a fire flow test results taken as part of a 2001 Master Plan study of the Fort Gillem onsite water distribution system:

ITEM	EAST GATE	WEST GATE
Service Road	Highway 42	Metcalfe Road
Water Main Size (inches, nominal)	12	8
Approx. Ground Elev. (feet) from Fort Gillem Site Map	923	960
Static Pressure (psig)	80	68
Residual Pressure (psig) at Fire Flow (gpm)	77 1,202	56 1,106

The precise location of the tests can not be determined from the report. However, it is logical to assume that the tests were taken on the Fort Gillem side of the distribution system.

The CCWA distribution system adjacent to the fort site is composed of 8", 12" and 16" DI pipes. The 12" mains located in Forest Parkway and Route 42 appear to have good capacity; however on-site-storage will be needed to meet fire flow duration requirements.

Proposed Water Supply & Demand

The study is based on abandonment of the existing Fort Gillem water distribution system. The new system would become part of the CCWA system.

The study undertaken to determine estimated water flow demands and corresponding major main sizes was developed based upon Alternatives A, B, and C, dated May 31, 2007. Exhibits showing the water main systems for each alternative are provided beginning after page V-27.

The design flow rates were based upon Clayton County Water Authority specifications included with this document. Flow rates were assigned to each land use, for each proposed alternative with flows generated based on acreage plus fire fighting demand and duration. Each of the alternatives uses a backbone system of mains to furnish the water needs for each of the individual site areas. The distribution mains within the individual site areas were not included in this study, since the street layouts within these areas are not known at this time.



Estimated Costs for Proposed Water Supply Systems

- Alternative A – \$3.8 million
- Alternative B – \$3.9 million
- Alternative C – \$3.7 million

Future Design Work

A more in-depth study of the water supply requirements can be undertaken as the roadway horizontal and vertical alignments and pods are further developed. Further development of the land uses and densities will also further substantiate the water supply design and support a more detailed cost estimate.



F. Dry Utilities

1. Electrical

The current electrical system consists of two transmission corridors, a sub station and installation distribution lines. The transmission corridors are on two separate easements controlled by Georgia Power and these transmission lines support the surrounding area as well as Fort Gillem. One transmission corridor is in use and one has been inactive for a number of years. Georgia Power wants to retain both of these transmission corridor easements for the purpose of supporting the reuse plan and the remaining Army Enclave.

The distribution system is owned and maintained by the Army. The distribution system is a mix of old, repaired, minimally maintained systems with one primary line system that was up graded in 1989 to four 12,000-volt lines running along Hood Avenue. Wire sizes and differing wire types exist through out the distribution system. While the transformers on the primary line system were replaced in 1989, they are not of the type used by GaPower and are of no use to them. The poles on which the transformers are mounted need to be replaced and do not meet current GaPower standards. All the distribution lines need to be reconstructed to meet acceptable standards.

The Army distribution systems in the remaining Army Enclave are underground and are in good shape. They will remain and can be maintained by the Army. The LRA will continue to work with GaPower and the Army to privatize the electric service for the Enclave.

For planning purposes on the part of the installation that is to be turned over to the local community and be redeveloped, the only planning constraints are the two Georgia Power Transmission Lines and easements, and the one GaPower substation.

Potential Worth for Reuse

There is no value to retaining any of the installation electrical distribution systems for use in the reuse plan as the current systems are in need of repair, replacement and upgrading to meet current standards for Lt. Industrial, Business Park, Residential, and Institutional uses.

Impacts on Alternatives

The existing electrical systems, transmission and distribution impacts would not have a differing benefit nor value among alternatives than those listed above for the preferred alternative.

2. Natural Gas

The natural gas system was upgraded and new construction completed in 1997. The system includes a propane/air mix backup system located in the southwest corner of the installation. The system is well-maintained and constructed of superior pipe (12"-6400 SDR). There is a loop consisting of two lines that run east and west, located south of the rail lines parallel to Hood Avenue. Distribution lines run off this main loop. The propane/air mix back up system refers to the operation of the propane back up system that is automatically started up when the pressure in the natural gas system drops. When this happens, air is mixed with the propane and pushed into the system to replace the natural gas with the mixture of propane and air that acts and burns like natural gas.



The natural gas system is operated by Exelon Services, Inc., Federal Group of Knoxville, Tennessee under an agreement with the Army. The system provides \$1 million a year in savings on the purchase and use of natural gas. The Army will own the system at the end of the agreement.

The system should be considered for retention and planned around. The major loop runs east and west, south of Hood Avenue and south of the existing rail lines. These lines should be preserved in a utility ROW or easement. The natural gas system and its propane backup system provide natural gas as a non-interruptible use, but at an interruptible rate that results in the \$1 million-a-year savings. This savings associated with the use of natural gas should be a great selling factor for light industrial and commercial users that rely upon the use of natural gas for heating and operations.

Potential Worth for Reuse

The retention of the natural gas system along with its propane backup system have the potential of saving users substantial sums in the costs of heating and operating their facilities. The Army currently claims a savings of \$1 million/year in natural gas costs as a result of this system. The owner and operator of the system, Exelon Services, Inc. of Knoxville, Tennessee claims its contract with the Army was extended an additional five years and that the Army will not own the system until 2013. The Army has told us they will own the system in 2009. Exelon Services is attempting to make a corporate decision on the future operation of the system.

Impacts on Alternatives

Alternatives B and C should also consider the retaining of the natural gas system with backup propane gas in some sort of utility easement. The location of these lines could be part of a buffer separating the light industrial/business park areas from the residential/institutional area.

3. Telecommunications & Fiber Optics

There is a new telecommunications under ground trunk line that was installed in 2003 that runs along the south side of Hood Avenue and into a new switch center in building 203. The line has both telephone and optical fiber capability supporting the telecommunication needs of First Army Headquarters and other Army functions on Fort Gillem. We have requested additional information from the Army but have not had a response to date.

These new underground telecommunication systems should be considered for retention in a utility ROW or easement. They are in the same general area as the natural gas lines and Hood Avenue and could be incorporated into one utility easement. There is the potential for having the utility easement form a buffer between the light industrial / business park areas and the Residential/Institutional areas.

Potential Worth for Reuse

These newly constructed under ground telecommunications lines can provide the latest high tech communications and video to the businesses and residents in the planned redevelopment area.

Impacts on Alternatives



The retention of the new underground telecommunications and optical fiber service installed along Hood Avenue should have the same benefits to the alternative plans as it could to the preferred plan.

G. Building Inventory

The planning team performed an onsite evaluation of the existing buildings within the Fort Gillem reuse area to determine their condition and suitability for redevelopment. Assistance in conducting the on-site evaluation was provided by Fred Bryant, Executive Director of Forest Park / Fort Gillem Local Redevelopment Authority and with Grady Myrick Jr., BRAC Personal Property Coordinator.

The Building Suitability Map on the next page identifies the buildings within the facility as:

- Significant – having potential for redevelopment;
- Not Significant – lacks potential for reuse;
- Possible Relocations – structures that may be reused if relocated.

The details of the individual building analysis are provided in Appendix C, including a table that provides a building by building summary of the facilities.

Preliminary Conclusions

Most of the building and facilities are not significant and will probably not be economically viable for use in the new development. The Existing Buildings Inventory exhibit included in Appendix page C-5 indicates those buildings that are significant and should be considered for use if compatible with the development plan. Asbestos and other environmental issues are definitely associated with the Headquarters Building and probably with other facilities as well. These factors must be considered whether in demolition or renovation. There was some interest in selling and moving some facilities, such as the houses, which are also indicated on the plan. Facilities in the Army enclave were not examined as those facilities will not be subject to the development.



H. Entitlement Strategy

To implement the plan that is ultimately approved by the LRA, there are certain due process and administrative approval processes that are required by state law or city ordinance to be undertaken in connection with the redevelopment of Fort Gillem. On the state level is the Development of Regional Impact (DRI) process, and at the municipal level are the rezoning and comprehensive planning processes. The redevelopment of Fort Gillem as envisioned by the LRA and the City of Forest Park should be in alignment with the land use decisions regarding the property that will advance the interests of the community.

Forest Park Comprehensive Plan 2005-2025

The City of Forest Park adopted a Comprehensive Plan in 1995 to meet the State standards for local comprehensive planning, as required by O.C.G.A. §36-70-1, et seq. The current document is the Comprehensive Plan Update 2005-2025, which is a major update to the 1995 Comprehensive Plan. The Comprehensive Plan is intended to serve several purposes. It provides a basis for the evaluation of all significant future development proposals such as requests for rezoning and applications for subdivision plat approval. Development and updating of plans for transportation, economic development, community facilities, housing, and natural/historic resources are also an integral part of the Comprehensive Plan. By considering these public functions together, interrelated services, infrastructure and development can be coordinated in compliance with community goals.

Accordingly, a significant portion of the Comprehensive Plan is the Land Use Element. Therein, existing land use is assessed, future land use needs are evaluated and a future land use plan is created for the City of Forest Park. It will therefore be critical that to the extent the vision for Fort Gillem changes what is currently adopted in the Comprehensive Plan, that the Comprehensive Plan is amended through the City's legislative process to reflect the desired changes for Fort Gillem.

The Comprehensive Plan also notes that the Forest Park Livable Centers Initiative (LCI) Study incorporates several policy recommendations for the creation of a mixed-use transit oriented development anchored by proposed transportation improvements in Forest Park. Many of these policies adhere to the principles of Traditional Neighborhood Development and seek to create a transit village in Forest Park's Main Street core. The goals of the LCI Study are instructive as to a proper land use integration of Fort Gillem into the fabric of Forest Park as a live-work, transit-oriented community.

First, the LCI Study calls for maintaining an interconnected street network leading into the transit village. For Fort Gillem, a street grid is essential for the master planning process.

Second, an interconnected network of bicycle lanes linking new neighborhoods within Fort Gillem to each other and with the rest of Forest Park should be created.

Third, the LCI Study calls for increased pedestrian orientation within a ½ mile radius of the proposed commuter rail station.

Fourth, design of the transit village should center on existing civic activity centers of the airport, State Farmer's Market, Forest Park Government Complex, and the soon-to-be redeveloped Fort Gillem.



Fifth, new development in the transit village should maintain visual compatibility with the existing surrounding neighborhoods.

Sixth, allowable densities should be scaled in concentric rings around the transit village, creating a smooth transition to the existing neighborhoods.

Seventh, traditional neighborhood mixed uses should be allowed within the core area of the transit village.

Finally, a multi-modal variety of transit options should converge within the transit village to support a dense urban environment.

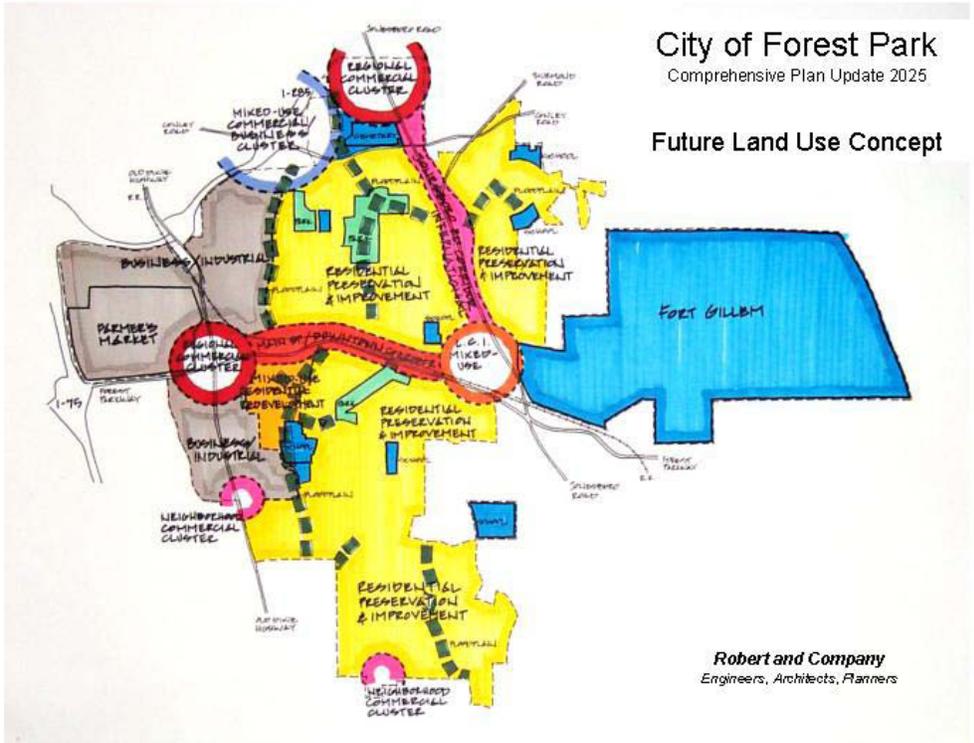
The Plan currently provides a future land use inventory, which reflects a distribution of land uses typical of a diverse municipality. Note that in the following comparison table, however, there is a definite preference that mixed use developments be an integral part of meeting the future land use needs of the community. In particular, there is a preference for more dense residential components, including transit options as a critical planning component.

Land Use	2004		2025		Net Change in Acreage
	Acres	% of Area	Acres	% of Area	
Low Density Residential	N/A	N/A	1,657.5	28.0%	N/A
Medium Density Residential	N/A	N/A	102.6	1.7%	N/A
High Density Residential	N/A	N/A	117.9	2.0%	N/A
TOTAL Residential	1,977.8	33.4%	1,878.0	31.7%	-99.8
Commercial	684.4	11.5%	611.6	10.3%	-72.8
Office/Professional	17.8	0.3%	38.6	0.7%	20.8
Office/Business	N/A	N/A	89.6	1.5%	89.6
Mixed Use Commercial/Residential	N/A	N/A	28.9	0.5%	28.9
Mixed Use Office/Residential	N/A	N/A	46.2	0.8%	46.2
Mixed Use Transit Village	N/A	N/A	74.6	1.3%	74.6
TOTAL Mixed Use	N/A	N/A	149.7	2.5%	149.7
Light Industrial	549.8	9.3%	639.5	10.8%	89.7
Public/Institutional	1,655.3	27.9%	1,667.4	28.1%	12.1
Transport/Communications/Utilities	681.1	11.5%	678.8	11.5%	-2.2
Parks/Recreation/Conservation	50.5	0.9%	170.4	2.9%	119.9
Undeveloped	309.4	5.2%	2.4	0.04%	-307.0
TOTAL Forest Park	5,926.0	100.0%	5,926.0	100.0%	

City of Forest Park Comprehensive Plan 2005 – 2025; Table 7.5 Comparison of Future Land Use 2025 with 2004 Existing Land Use

Rezoning Process

For the plan of redevelopment for Fort Gillem envisioned by Forest Park and the LRA to be implemented, the City would for the first time be imposing zoning regulations on the site. Although Fort Gillem has been part of Forest Park since 1941 when it was established as the Atlanta General Depot, it has not been subject to the zoning or other regulatory authority of local governments because it is owned by the U.S. Army.



City of Forest Park Comprehensive Plan 2005 – 2025 Map 7.2 Future Land Use Concept

The Future Land Use Concept Map shown above demonstrates that the City has heretofore not included Fort Gillem in its land use planning. In meeting the objectives of the City’s Comprehensive Plan 2005-2025, it is appropriate to facilitate a mixed-use development in an appropriate area by modifying current zoning codes and promoting development opportunities. In addition, land use planning through zoning can engender the creation of an appropriate employment center at the site of Fort Gillem.

The City of Forest Park has a comprehensive zoning process that is embodied in its Code of Ordinances. Land use is regulated by district and character such as residential (single family), multi-family, condominium-townhouse, commercial, institutional, industrial and planned unit development. Within each type of land use are varying degrees of density and land use intensity that delineate the location and character of a specific zoning category. Considering the master-planned, mixed-use character of the various alternatives envisioned for the redevelopment of Fort Gillem, it appears as though the Planned Unit Development District (“PUD”) would be more appropriate as the rezoning mechanism, rather than seeking rezoning of the varying types of land use by parcels. A PUD can achieve a master-planned character for the site as well as tailor the types of uses that will be allowed within each district or category.

PUD zoning is governed by Forest Park Code of Ordinances §8-8-63. The intent of the PUD is to “encourage development of compatible land uses on a scale larger than that of individual small parcels in a comprehensively planned setting. Such developments are to be very sensitive to the interrelationships of use, natural environment, architectural styles, scales of structures, intensities of development, and the larger community setting in which it is situated.” Code §8-8-63(a). Specifically, Fort Gillem would be a comprehensive PUD with residential, institutional-commercial, and light industrial uses, as well as green space contained therein. Code §8-8-63(c). For purposes of zoning compliance, a PUD district property is treated as one parcel.



Importantly, the City doesn't have to wait for a developer to seek to rezone; the municipality can initiate rezoning. In fact, the City may want to consider rezoning the parcel to a PUD early in the process so that there is certainty from land use perspective of the types of uses that may be constructed by future developers. As part of the PUD rezoning, a delineation of permissible land uses can be legislated in accordance with the specific reuse strategy adopted by the LRA and the City. Any changes to that land use plan would be through the zoning process. Alternatively, the City could pursue a strategy of establishing zoning designations on a parcel by parcel basis based upon the adopted reuse plan.

It is important to note that rezoning land may cause a significant increase in fair market value, particularly from the U.S. Army's perspective; however, the financial impact must be weighed against the land use planning benefits. With the objective of aligning policy and land use goals of a mixed-use, transit oriented development with a focus on this site for appropriate residential density, institutional and office growth, a balance of uses can be designed for Fort Gillem as a PUD. Moreover, to realize the objective of quality job creation, the community may want to allow only such light industrial uses at the site that employ large numbers of skilled workers such as headquarters and manufacturing operations and limiting light industrial uses, such as warehousing, that employ significantly fewer people. Thus again, a PUD is uniquely suited to create a site plan that limits uses to those that are compatible with the redevelopment plan and the vision of the community.

Development of Regional Impact (DRI) Approvals

As defined by state law, Developments of Regional Impact (DRI) are large-scale developments that are likely to have regional effects beyond the local government jurisdiction in which they are located. O.C.G.A. §50-8-1, et seq. To maintain eligibility for certain state and federal transportation funding, a local government must submit every potential DRI it is considering for review and comment.

A DRI review is initiated by a county or city as part of the existing development review process. Examples of filings that trigger a DRI process include rezoning, special use permit, development permit, land disturbance permit or building permit. The maximum time allowed for a DRI review is 45 days from the time the review is initiated. The review officially begins when the local government notifies the regional development center. The Atlanta Regional Commission (ARC) is the regional planning and intergovernmental coordination agency for the 10-county area that includes Clayton County. The Georgia Regional Transportation Authority ("GRTA") also has a role in the DRI process for projects located within 13 counties and municipalities in the Atlanta metropolitan area. GRTA's mission therefore requires that it review DRIs within its jurisdiction. O.C.G.A. §50-32-14.

Thresholds are used to determine whether a proposed development qualifies as a DRI. A mixed-use project covering more than 120 acres qualifies as does industrial greater than 500,000 gross square feet or covering more than 400 acres, and residential projects with greater than 400 dwelling units. Fort Gillem would clearly qualify to receive DRI review. Note that master-planned, multi-phased projects are reviewed in their entirety rather than phase by phase.



Process

In this instance, upon receiving a rezoning request, the City of Forest Park would submit a DRI “Form 1B”, which acts as official notification that a development qualifying as a DRI has been received. Form 1B is submitted on-line to DCA, ARC and GRTA. The local government must have detailed information about the project that describes almost every aspect of the development sought. ARC then has 5 days to determine whether the developments meets the applicable threshold. Once ARC determines that the project warrants regional review, then within 10 days, ARC holds a joint pre-review conference with GRTA staff, the local government, and the applicant. It is during that time that a determination is made regarding what additional information is required for the review.

Once ARC receives an official ‘DRI Review Initiation Request’ form from the city, ARC and GRTA must, within five days, issue a letter to the local government, the applicant and DCA stating that: (1) the ‘DRI Review Initiation Request’ submittal is complete and the DRI review process is underway; or (2) the submittal is incomplete and identify any additional materials the local government and/or the applicant must provide. The review process will not begin until both the RDC and GRTA certify the completeness of the submittal. If all of the necessary information is provided, the ARC staff will request that the city submit the “Form 2” and thus begins the 30 to 45 day review period. It is important to note that the city may not take any official action related to the rezoning request until the DRI review process is complete and the city has reviewed and considered the recommendations found in the DRI. The city may undertake preliminary staff administrative functions, but no planning or zoning action may take place.

As part of its review, ARC notifies any other potentially affected governments and agencies, including the Georgia Departments of Transportation, Natural Resources, and Community Affairs in all cases, and likely Clayton County in this case. DCA’s rules state that ARC’s evaluation of DRIs shall consider inter-jurisdictional impacts on neighboring jurisdictions, on the natural environment, on the economy of the region, on public transportation, water supply, sewer, solid waste, or other public facilities; on the ability of people to find adequate housing reasonably accessible to places of employment, and whether the planned development is consistent with ARC’s Development Guides and Policies.

ARC determines whether the DRI is in the best interest of the Region and the State or is not in the best interest of the Region and the State. Other comments can also be included. This finding is only an advisory that no adverse impacts or conflicts exist and the project has no adverse impact on an approved regionally important resource. The finding does not imply that the project is in the best interest of the city or county where it is to be located. If there is a negative public finding by the ARC, there are formal mediation processes that can be undertaken to resolve conflicts. Local governments are strongly encouraged to give careful consideration to ARC’s finding in their decision making process.

Georgia Regional Transportation Authority (GRTA) Review is undertaken while the ARC Review is also taking place. Additionally, GRTA has an important informal and optional stage that is recommended for the benefit of the applicant. A Methodology Meeting can occur as a preliminary informal meeting to discuss how the applicant’s project will be reviewed and what data and analysis will be required. This stage includes discussion of the development plan and coordination of the plan with the technical analysis. This Methodology Meeting is between the GRTA Staff and the applicant. These stages occur prior to filing any forms and may be initiated by a phone call. To avoid delays during the formal process, GRTA strongly



recommends that before any application triggering DRI approval is filed at the local level, the Methodology Meeting should be scheduled

Following the filing of Form 1b, GRTA works with the applicant to identify the size, scope, and type of analysis to be performed and the materials to be submitted. The stage ends with a Letter of Understanding (LOU), which identifies the scope of traffic analysis to be done. Next, the developer should be prepared to present the following information at the Pre-Application Conference with ARC and GRTA:

- Project location, size, and character.
- Proposed methodology to be used for traffic distribution and assignment.
- Assumptions related to data collection activities. For example, what is the acceptable age of old traffic counts to be used, and how will they be factored to existing conditions?
- Method to be used to project future year background traffic.
- Assumptions related to use of TIP or RTP projects as part of existing or future conditions analysis.
- Capacity analysis procedures.
- Trip generation data sources, including all variables and assumptions used to calculate proposed trip generation.
- Mode split assumptions.
- LOS standards for area roadways.
- Other pertinent factors.

GRTA recognizes that some DRIs do not justify full-blown GRTA review because their impacts on regional mobility and air quality are negligible or even positive. Accordingly, expedited review, with shortened timeframes and reduced submittal requirements, is available under certain circumstances. In general, DRIs that meet one of the following conditions may be eligible for expedited review:

- generate less than 1,000 average daily vehicular trips and do not require an air quality permit from the Georgia EPD;
- provide a mix of uses that creates a trip reduction of at least 50% below standard trip generation rates based on internal capture and transportation by means other than single occupant vehicles;
- significantly reduce average vehicle miles traveled; or
- significantly promote the use of alternatives to the single-occupant vehicle.

GRTA will grant Expedited Review to DRIs that satisfy the specific expedited review criteria in Section 3-101 and 3-102 of the Procedures and Principles for GRTA Development of Regional Impact Review, as determined pursuant to acceptable methodologies and supporting criteria.

For non-expedited reviews, GRTA evaluates DRIs according to the following criteria:



- The proposed DRI is likely to promote improved regional mobility in terms of the quality, character, convenience and flexibility of transportation options;
- The proposed DRI is likely to promote improved regional mobility by reducing vehicle miles of travel;
- The proposed DRI is likely to promote improved regional mobility because it is located in an urban core, town center, an activity center previously designated by an RDC, a rail/transit station development or is a part of a publicly sponsored redevelopment or infill initiative;
- The proposed DRI is located sufficiently close to existing or planned transit facilities to indicate a likelihood of significant use of transit by residents, employees and visitors of the proposed DRI;
- The proposed DRI is located within an established Transportation Management Area, which creates a likelihood that the proposed DRI is reasonably anticipated to result in improved regional mobility as a result of the Transportation Management Area;
- Offsite trip generation from the proposed DRI is reduced by at least fifteen percent (15%), or, in the event that a proposed DRI is unable to satisfy the trip reduction standard established in this subsection because of other conditions that are beyond the control of the developer or the affected local government, the proposed DRI implements all available trip reduction techniques that are reasonably practical.
- The proposed DRI:
 - Contains a mix of uses that are reasonably anticipated to contribute to a balancing of land uses such that it would be affordable for at least ten percent (10%) of the persons who are reasonably anticipated to be employed in the proposed DRI are reasonably anticipated to have an opportunity to reside within the DRI; or
 - Is located in an Area of Influence where the proposed DRI is reasonably anticipated to contribute to a balancing of land uses within the Area of Influence such that twenty-five percent (25%) of the persons who are reasonably anticipated to be employed in the proposed DRI have the opportunity to live within the Area of Influence; or
 - Is located in an Area of Influence with employment opportunities which are such that at least twenty-five percent (25%) of the persons who are reasonably anticipated to live in the proposed DRI and are reasonably expected to be employed will have an opportunity to find employment appropriate to such persons' qualifications and experience within the Area of Influence.
- The proposed DRI is not located in any area where the existing level of development and availability of infrastructure within the Area of Influence of the proposed DRI is such that the proposed DRI is reasonably anticipated to result in unplanned and poorly served development that would not otherwise occur until well-planned growth and development and adequate public facilities are available.



In the event GRTA determines that the degree to which the DRI satisfies these criteria is significant in the context of GRTA’s purpose and objectives to improve regional mobility, GRTA will approve the DRI Plan of Development. The Development can also be approved if GRTA makes the finding that the DRI includes uses or other benefits that mitigate non-compliance or there is a compelling need for the DRI in the area of influence. In the event GRTA denies a DRI, that denial has the effect of disallowing the expenditure of Federal or State Transportation funds related to the proposed development for a period of 5 years. Only a three-fourths vote of the Forest Park City Council can override this GRTA determination. Pursuant to the applicable administrative rules, a three-fourths vote of reversal by the City Council within 60 days after a GRTA decision not to approve will override the five-year disallowance of transportation funding of a project. GRTA monitors the expenditure of state and federal funds for any expenditures in violation of a GRTA decision.



I. Army Enclave

The Army Enclave is a major constraint on the redevelopment of the property to its highest and best use, primarily because it lies between the property to be redeveloped and the remainder of Forest Park. One goal of the redevelopment plan is seamless transition between present day Forest Park and the redevelopment area. To address these concerns, all of the alternative plans include an access to the redevelopment area along the northern boundary of the Army Enclave and a designation that Hood Avenue be the southern border of the Enclave. As outlined in the alternative plans and especially the recommended plan, this expanded access provides needed and optimum transportation access and separation between truck and passenger traffic. The Army has exhibited cooperation and openness to the issues associated with the final shape and size of the Enclave, and they will be the source of continued discussion.

The ongoing uses and personnel working within the Army Enclave are expected to provide support to commercial businesses in the redevelopment area, such as retail stores, restaurants and housing, just as the Army's continued use of the Enclave will be supported by the availability of expanded retail, restaurant and housing opportunities. The City of Forest Park will continue to interface with the Army Enclave over time, providing municipal services and support, such as utilities and police and fire protection, at levels in the mutual best interest of the City and the Army.



J. Homeless Interests

Outreach to Homeless Assistance Providers

Fort Gillem lies entirely within the city limits of Forest Park, Clayton County, Georgia. The residents of Forest Park have a vested interest in the redevelopment planning process for Fort Gillem's reuse, an interest shared by the extended community. To assure that these interests were adequately represented, the Forest Park/Fort Gillem Local Redevelopment Authority ("LRA"), formed to oversee the redevelopment process, is comprised of the Mayor of Forest Park, the Forest Park City Council, the City Manager of Forest Park, the Commissioner of the Georgia Department of Community Affairs and the President and CEO of the Clayton County Chamber of Commerce.

To broaden community input, the LRA created three subcommittees:

- Healthy Community and Quality of Life Subcommittee
- Reuse and Design Subcommittee
- Finance and Economic Development Subcommittee

Each subcommittee is comprised of members of the LRA, employees of the City of Forest Park and Clayton County and private citizens of the City of Forest Park and Clayton County. The Mayor of the City of Lake City, a community on the southern border of Fort Gillem, also serves on a subcommittee.

In an effort to ensure widespread participation by all interested stakeholders, especially on the issue of homeless reuse, the LRA obtained a HUD generated mailing list of homeless assistance providers located within the vicinity of Fort Gillem and sent letters to these providers requesting the submission of notices of interest (NOI) regarding the real property declared surplus at Fort Gillem. Additionally, on May 26, 2006, (within 30 days of the Military Department's May 9, 2007, publication of available surplus property) the LRA published an advertisement in two newspapers of general circulation, the Atlanta Journal-Constitution and the Clayton News Daily. The advertisement again solicited NOIs from homeless assistance providers regarding the surplus property at Fort Gillem. The deadline for submitting an NOI was September 25, 2006.

On July 13, 2006, the LRA conducted a workshop in which representatives of the homeless and other interested persons were invited to participate. During the workshop, the executive director of the LRA provided an overview of the realignment and disposal process and informed of the schedule and procedure for submitting NOIs. Additionally, a representative from HUD, who attended the workshop, reviewed the role of HUD in the reuse planning process. Attendees of the workshop received:

- A timeline summary for community and federal action
- A copy of the public notice request for NOIs
- Content requirements for NOIs submitted by homeless assistance providers
- Content requirements for NOIs submitted by entities interested in obtaining property via a public benefit conveyance



- A map of Fort Gillem
- A property information summary for Fort Gillem

Subsequent to the workshop, representatives of the homeless were invited to attend a tour of Fort Gillem hosted by the LRA.

State of Homelessness in the Vicinity

The property at Fort Gillem is subject to two local economic and community development plans – the Clayton County, Georgia Consolidated Plan 2006 - 2010 and Action Plan 2006 Consolidated Plan) and the City of Forest Park Comprehensive Plan 2005 – 2025 (Comprehensive Plan).

1. Consolidated Plan

In the Consolidated Plan, Clayton County identifies the limited quantity of emergency shelter facilities as being the highest need (gap) among homeless activities, followed by the need for additional transitional housing. The Consolidated Plan further indicates that a significant portion of homeless persons who need housing in Clayton County are women and children. This need has been reconfirmed each year of this Consolidated Plan period through an informal survey of providers of homeless housing and services.

The Consolidated Plan contains the table on the following page, accompanied by the following narrative:

“Inadequate resources of three types of housing which constitute the housing stock resources are consistently reaffirmed. Clearly, additional housing units [emergency shelter, transitional housing, and permanent housing] and bed spaces must be made available in Clayton County to homeless persons and families.”



HOMELESS AND SPECIAL NEEDS POPULATION (HUD TABLE 1A)					
<i>Individuals</i>					
	Estimated Need		Current Inventory	Unmet Need/Gap	Relative Priority
Example	Emergency Shelter	115	89	26	M
Beds/Units	Emergency Shelter	210	25	190	H
	Transitional Housing	43	20	43	M
	Permanent Housing	267	0	170	M
	Total	520	45	403	
Estimated Supportive Services Slots	Job Training	35	20	0	M
	Case Management	200	0	0	M
	Substance Abuse Treatment	20	9	0	M
	Mental Health Care	50	82	32	M
	Housing Placement				M
	Life Skills Training				M
	Other				
Estimated Sub-populations	Chronic Substance Abuse	8	10	0	H
	Seriously Mentally Ill				H
	Dually-Diagnosed	17	26	9	H
	Veterans				H
	Persons with HIV/AIDS	56	12	44	H
	Victims of Domestic Violence	38	32	6	H
	Youth	55	60	0	H
	Other				
<i>Persons in Families With Children</i>					
Example	Emergency Shelter	115	89	26	M
Beds	Emergency Shelter	1,116	20	1096	H
	Transitional Housing	298	5	271	M
	Permanent Housing	23	0	21	M
	Total	1,437	25	1,388	
Supportive Services Slots (This Section is OPTIONAL)	Job Training	32	20	12	M
	Case Management	68	27	41	M
	Substance Abuse Treatment				M
	Mental Health Care				M
	Housing Placement				M
	Life Skills Training	68	27	41	M
	Other				
Estimated Sub-populations	Chronic Substance Abuse				H
	Seriously Mentally Ill				H
	Dually-Diagnosed				H
	Veterans				H
	Persons with HIV/AIDS	18	0	18	H
	Victims of Domestic Violence	83	60	23	H
	Youth				H
	Other				



The Consolidated Plan also contains the following table, accompanied by the following narrative:

“Presented here are needs for assistance for extremely low income, very low income, and moderate-income families by renter/homeowner status, family size, age status [elderly/non-elderly], disability status, and HIV/AIDS status. Needs are described in terms of the following problems: cost burden, severe cost burden, housing condition (standard / sub-standard), and overcrowding. [The table] lists estimated Priority Needs for Low- and Moderate-Income Renters, Homeowners, and Special Populations who are not homeless.”

PRIORITY HOUSING NEEDS SUMMARY (HUD TABLE 2A)					
PRIORITY HOUSING NEEDS (Households)		Priority Need Level High, Medium, Low		Unmet Need	Goals
Renter	Small Related	0-30%	H	2594	50
		31-50%	H	2782	50
		51-80%	H	4353	20
	Large Related	0-30%	M	526	5
		31-50%	M	611	5
		51-80%	M	1043	5
	Elderly	0-30%	M/H	886	15
		31-50%	M/H	397	75
		51-80%	M/H	323	10
	All Other	0-30%	L	1385	0
		31-50%	L	1577	0
		51-80%	L	3153	0
Owner	0-30%	H	1282	0	
	31-50%	H	1852	600	
	51-80%	H	6091	150	
Special Populations		0-80%	L	500	0
Total Goals					900
Total 215 [Affordable Housing] Goals					900

2. City of Forest Park Comprehensive Plan 2005 – 2025

As part of an ongoing planning process, the City of Forest Park prepared the Comprehensive Plan, which covers a long-range horizon of 20 years, 2005-2025, and includes short- and intermediate-term growth projections for both population and economic activity. This Comprehensive Plan also includes a housing element that provides an analysis of the existing inventory of the housing stock and a determination as to the adequacy of the housing stock in serving existing and future population as well as economic development goals.

The value of owner occupied housing units and the median gross rent in Forest Park, Clayton County and Georgia is summarized in the tables on the next page. The median value of owner occupied housing units in Forest Park (\$69,600) is substantially lower than the median value of housing in both Clayton County (\$92,700) and Georgia (\$111,200). The median gross rent in Forest Park (\$621), while on par with the state (\$613), is lower than Clayton County (\$699) and Metro Atlanta (\$746). Given the modest home values and low rental rates in Forest Park, the Comprehensive Plan indicates that Forest Park does not appear to lack affordable housing; however, the Comprehensive Plan indicates that the two key needs of the homeless are the inadequate supply of emergency shelters and the inadequate supply of transitional housing.



VALUE OF SPECIFIED OWNER-OCCUPIED HOUSING UNITS IN 2000 (CITY, COUNTY, AND STATE)					
Range of Value	City of Forest Park		Clayton County		Georgia %
	Units	%	Units	%	
Less than \$50,000	374	10.40%	1,099	2.40%	9.50%
\$50,000 to \$99,999	2,906	80.60%	26,340	58.30%	34.20%
\$100,000 to \$149,999	262	7.30%	13,074	28.90%	25.80%
\$150,000 to \$199,999	39	1.10%	3,093	6.80%	13.30%
\$200,000 to \$299,999	13	0.40%	1,037	2.30%	10.20%
\$300,000 or greater	10	0.30%	518	1.10%	7.00%
Total	3,604	100.00%	45,161	100.00%	100.00%
Median Value (\$)	\$ 69,600		\$ 92,700		\$ 111,200

GROSS RENT, SPECIFIED RENTER-OCCUPIED HOUSING UNITS, 2000 (CITY, COUNTY, AND STATE COMPARISON)						
Gross Rent	City of Forest Park		Clayton County		Georgia	
	Units	%	Units	%	Units	%
Less than \$250	61	2.10%	821	2.60%	84,279	9.30%
\$250 to \$499	443	15.00%	2,557	8.00%	231,100	25.50%
\$500 to \$749	1,950	65.90%	16,686	52.50%	301,088	33.20%
\$750 to \$999	412	13.90%	10,151	31.90%	200,611	22.10%
\$1000 or more	91	3.10%	1,562	4.90%	88,835	9.80%
Total Units with Cash Rent	2,957	100.00%	31,777	100.00%	905,913	100.00%
Median Gross Rent (\$)	\$ 621		\$ 699		\$ 613	

Notices of Interest

In response to its outreach efforts, the LRA received four NOIs prior to the September 25, 2006 deadline and two NOIs that were received after this deadline. (ref. Appendix D: Notices of Interest). After the review and outreach process, the LRA elected to approve two NOIs, those submitted by Calvary Refuge Center, Inc. (the "Center") and Clayton County Community Services Authority, Inc. ("CCCSA"), and to disapprove the remaining four NOIs.

1. Approved NOIs

The Center and CCCSA collaborated to submit NOIs proposing to establish a transitional and emergency shelter for women with male children between the ages of 11 to 17 (up to 100 occupants). In approving these two NOIs, the LRA has agreed to provide funding to design and construct a new facility of approximately 4925 square feet (ref. Appendix E: New Facility). This new facility will be built on property presently owned by the Center in Forest Park, Georgia, consisting of approximately 5.853 acres. The new facility will be a separate building from existing facilities now owned by the Center, but the services to be provided by the Center at the new facility will be supported by activities currently conducted at the Center's existing facilities. This funding support is being provided in lieu of providing Fort Gillem surplus property to the Center and CCCSA. By being co-located with an existing program, the proposed program is more feasible and achievable than seeking to locate the program at Fort Gillem.



The LRA identified five key reasons for supporting the joint proposal submitted by the Center and CCCSA:

- The Consolidated Plan identifies the limited quantity of emergency shelters as being the highest need (gap), and this proposal directly responds to that need.
- The Consolidated Plan indicates that a significant portion of homeless persons needing housing in Clayton County are women and children, and this proposal further responds to that need.
- The Comprehensive Plan states that the two key needs of the homeless are the inadequate supply of emergency shelters and the inadequate supply of transitional housing, and the proposal would provide a solution to part of the need for emergency shelter.
- The Center and CCCSA are recognized by the Internal Revenue Service as 501(c)(3) tax-exempt entities and each has a well-established track record for providing emergency and transitional housing and related support services in the City of Forest Park and the County of Clayton.
- The Center and CCCSA have a proven ability to generate revenues and to manage an operating budget.

2. Disapproved NOIs

In addition to the approved NOIs, the LRA received NOIs from First Light Vision, Inc., Weinza House, Inc., Covenant House Georgia Inc. and Handled With Care, Inc. Following is a summary of the programs proposed by each entity and the reasons for disapproving the NOI.

First Light Vision, Inc. – First Light submitted an NOI proposing to establish a shelter which would provide six months of transitional housing for women and women with children. The LRA elected not to approve this NOI for the following reasons: (i) the proposed program is redundant with the programs currently provided by the Center and CCCSA; (ii) First Light is not presently a 501(c)(3) entity; (iii) First Light has not demonstrated that it has the capacity to carryout the proposed program (i.e. it is newly established and without a track record for providing this type of service); (iv) First Light lacks the financial resources required to operate this type of shelter; and (v) the off-base building identified by First Light (as an alternative to on-base property) as being suitable for the proposed shelter is not appropriately zoned and there is no assurance that the community will support such a change in zoning.

Weinza House, Inc. – Weinza submitted an NOI proposing to establish a transitional recovery residence for males and females that suffer from alcohol and substance abuse. The LRA elected not to approve this NOI for the following reasons: (i) the proposed program is not directly linked with housing homeless individuals (i.e. individuals with no primary nighttime residence or whose primary nighttime residence is a shelter); (ii) neither the Consolidated Plan nor the Comprehensive Plan indicate that the proposed program fulfills a gap in the continuum of care; (iii) Weinza has not demonstrated that it has the capacity to carryout the proposed program (i.e. it is newly established and without a track record for providing this type of service); (iv) Weinza failed to demonstrate that it has the financial resources required to operate this type of shelter; and (v) Our Brothers and Sisters, a treatment facility in Clayton County, presently provides counseling and treatment for homeless individuals suffering from alcohol and substance abuse.



Covenant House Georgia Inc. – Covenant House submitted an NOI proposing to establish an independent living facility for male and female youth. The LRA elected not to approve this NOI for the following reasons: (i) the NOI was submitted 24 hours after the September 25, 2006 deadline; (ii) Covenant House has demonstrated a diminished level of interest by not responding to multiple invitations from the LRA to participate in the reuse planning process; and (iii) the NOI does not directly respond to the key needs of the homeless as identified in the Consolidated Plan and the Comprehensive Plan.

Handled With Care, Inc. – HWC submitted an NOI proposing to establish a transitional living facility for young women. The LRA elected not to approve this NOI for the following reasons: (i) the proposed program is redundant with the programs currently provided by the Center and CCCSA; (ii) HWC failed to demonstrate that it has the financial resources required to operate this type of shelter; and (iii) the NOI was submitted three (3) months after the September 25, 2006 deadline.

Legally Binding Agreements

A proposed legally binding agreement (“LBA”) for the homeless accommodation to be provided to the Center is attached. (ref. Appendix F: Form of Legally Binding Agreement). Further, attached is the executed Memorandum of Agreement with the Center, subject to the conditions and contingencies set forth therein. (ref. Appendix G: Memorandum of Agreement).

Balancing Redevelopment & Homeless Assistance

The Consolidated Plan states that the vision for Clayton County will reflect a safe well-balanced, quality of life for people of all backgrounds and economic circumstances. The county should be a place where people can feel good about where they live, have the opportunity for employment, have a sense of community spirit and are concerned for their future and the well being of their neighbors. The vision to combat homelessness, as set forth in the Consolidated Plan, includes a requirement to address a root cause of homelessness which is identified as the limited financial capacity of homeless households.

Similar to the Consolidated Plan, the Comprehensive Plan expresses the vision for Forest Park as follows:

“The City of Forest Park will be a community that promotes progress by striving for balanced growth and development that is representative of an increasingly diverse population. The city will protect and enhance its unique character and qualities; environmental, cultural and historic resources; public services, facilities and infrastructure; and economic climate of opportunity and growth in order to realize long term prosperity and enhanced quality of life.”

The Comprehensive Plan identifies the two key homeless needs issues in Clayton County as an inadequate supply of emergency shelters and transitional housing.

Consistent with the stated vision for Clayton County and Forest Park, the six goals established by the LRA to guide the redevelopment planning process are:

- To stimulate economic growth
- To create a high value redevelopment plan
- To improve education
- To improve quality of life



- To improve the perception of the area
- To ensure one community

To achieve these goals, the LRA has adopted a reuse plan for Fort Gillem focused on job creation with the view that many of the goals can best be met with economic stimulus. In the reuse plan, fully 55% of the property at Fort Gillem is devoted to job-generating uses, including light industrial, a business park and a retail and office development. The reuse plan also sets aside portions of the property to be used for institutional, housing and open space.

Because the homeless need is best addressed off-base, the goal of reusing the base so as to drive economic redevelopment can be balanced with the need for the recommended homeless accommodation. The LRA has agreed to provide funds needed to design and construct the homeless shelter for women with male children, which will be constructed adjacent to the current facilities of the Center. The off-site location is better situated to complement the services currently provided by the Center, and will require a smaller increase in the Center's operating budget. The obligations of the LRA in the LBA are subject to the conditions as set forth in the LBA.

Public Comment

Throughout the Fort Gillem planning process the community was invited to attend public meetings where attendees were encouraged to comment on proposed reuse plans and the accompanying homeless accommodation. Notices of upcoming meetings were published on the LRA website, in a routinely circulated LRA newsletter and local newspapers. At the conclusion of each meeting, participants were permitted to ask questions, make comments and voice any concerns.

The LRA completed its draft of the Fort Gillem Homeless Assistance Submission (HAS) on June 13, 2007. A full copy of the Fort Gillem HAS was made available for public review at Forest Park City Hall. Additionally, the public could view a copy of the draft by visiting the LRA website and selecting the appropriate hyperlink.

A public hearing on the Fort Gillem HAS was held on June 26, 2007 and a notice published in a local newspaper. This meeting was opened by an LRA representative who briefly discussed the homeless outreach process. After advising that the Fort Gillem HAS was available for public review on the LRA website and at Forest Park City Hall, the LRA representative described each of the NOIs received from homeless assistance providers, explained the reasons for either approving or disapproving an NOI, and summarized the requirements of legally binding agreements. Next, the LRA representative recapped the major components of the adopted Fort Gillem reuse plan and described how the plan and the HAS attempted to balance redevelopment of Fort Gillem with the needs of the homeless. Attendees were invited to view the approved reuse plan. At the conclusion of the presentation, all meeting participants engaged in dialogue regarding the Fort Gillem HAS and the reuse plan.

3. Public Benefit Transfer Outreach

The LRA has not received any NOIs requesting public benefit conveyances. The May 26, 2006 newspaper advertisement that solicited NOIs from homeless assistance providers also solicited NOIs from entities interested in public benefit conveyances. Nevertheless, the LRA could later propose uses for portions of the redevelopment property that could best be accomplished through public benefit conveyances.



VI. ENVIRONMENTAL SUMMARY

The full environmental analysis and summary for Fort Gillem is provided in Appendix D and summarized below.

The Fort Gillem installation may be characterized as a light industrial facility that has been used for warehousing and maintenance activities for approximately 70 years. During that period, soil and groundwater impacts have occurred due to releases from petroleum storage tanks, spills of maintenance chemicals, such as cleaning solvents and burial of waste including but not limited to: oils, lubricants, equipment, narcotics, medical supplies, sludge, used product containers, and garbage. Available records indicate multiple, relatively small burial sites that are concentrated in the northwest corner of the property and along the eastern half of the southern boundary. Refer to Appendix D Figure 1 for a summary of environmental concerns associated with soil and groundwater impacts.

In addition to soil and groundwater impacts, organic constituents in the impacted soil and buried waste can create vapors as degradation occurs over time. Vapors can also emanate from contaminated ground water as it migrates away from the source area. Although vapor assessment has been limited thus far, the groundwater plumes shown in Appendix D Figure 1 are prime areas for the potential presence of organic vapors.

Dozens of large warehouses and service buildings occupy the property along with multiple smaller office buildings, stores, and residences. Many of these structures contain hazardous building materials including asbestos, lead-based paint, and miscellaneous materials such as light ballasts, mercury switches, and refrigerants. Radioactive materials have also been stored at the base. Refer to Appendix D Figure 2 for a summary of environmental concerns associated with facilities impacts.

Redevelopment of the property must consider the following basic environmental affects:

- The effect of soil and groundwater impacts on future ground disturbing activities
- The effect of vapor intrusion on future building occupants
- The effect of hazardous building materials on the disposal of demolition waste
- The effect of other environmental considerations such as natural, cultural and historical impacts
- The effect of each of these elements on the cost of redevelopment, on the health and safety of workers during redevelopment activities, and on the public afterwards

Regulatory agency controls and oversight will be mandated throughout the redevelopment process and potentially for many years post-development until all impacted areas have reached acceptable levels. As such, it is essential that any transferee devise an environmental strategy to address ongoing environmental liabilities.



Due to the nature and extent of known soil and groundwater impacts, it will be impractical for a transferee to facilitate a “clean transfer” within a reasonable time. Therefore, an effective environmental strategy should at least account for the following issues:

- An “Early Transfer” process
- Responsibilities for post-transfer monitoring and remediation
- Liability for remnant conditions
- Controls on property access
- Abatement of hazardous building materials prior to demolition or renovation
- Soil and groundwater clean up standards and the potential for regulatory changes
- Protection against vapor intrusion into new structures

The ultimate redevelopment and reuse plan should account for environmental implications and liabilities associated with siting of various land uses such as industrial, commercial, institutional, hospitality, residential and green space. The current perception is that soil, groundwater and vapor impacts will be least accommodated by single-family residential land use and potentially most accommodated by industrial land use or green space.

It is advisable that any transferee give serious consideration to entering the property, or portions thereof, into the Georgia Voluntary Brownfield Program (VBP) prior to acquisition. This program can be a primary tool in controlling legal and regulatory liabilities associated with pre-existing subsurface contamination at the property. In addition, it is important to avoid having additional portions of the property listed on the Hazardous Site Inventory, if possible, as a further means of controlling environmental liabilities.

Available environmental information indicates that groundwater contamination has migrated to properties beyond the boundaries of the base in two areas, primarily residential properties to the northwest and to the southeast of the base. Therefore, an environmental strategy must consider the potential for third-party liabilities.

Regardless of the thoroughness of environmental assessments performed at the installation to date or in the future, there is a risk that unknown or unidentified environmental conditions will be encountered during site development activities because of the long term, undocumented, industrial nature of past site use. Any transferee should develop a comprehensive environmental management plan to instill awareness in contractors, promote safe practices, and establish a line of communication and procedures for implementing corrective actions.